



# Research Aid

## *Free World Oil Refineries*

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## FREE WORLD OIL REFINERIES

### DISCUSSION

This research aid is a compendium of the crude capacity and ownership for all petroleum refineries in the Free World (Appendix Tables 1-4), based on data available as of 1 September 1975. It updates an earlier version -- *World Oil Refineries* (A(ER) 74-61, June 1974) -- which treated the same subject as of 1 January 1974. The tables were derived from unrounded data; therefore, some discrepancies may appear to exist between volume and percent of capacity.

Free World crude refining capacity reached a record 58.9 million b/d on 1 September 1975, an increase of 8% over the 20-month period since 1 January 1974. Growth is expected to continue at a reduced rate, the industry being faced in the short run with stagnant product demand of approximately 46 million b/d. The United States, Western Europe, and Japan have 69% of Free World refining capacity, unchanged from 20 months ago.

#### International Oil Companies and Private Owners

The seven major international oil companies own 25.3 million b/d of refining capacity, or 43% of the Free World total. This represents only a slight increase in absolute capacity (581,000 b/d) in the past 20 months and a decline of 2 percentage points in share of Free World capacity. The best growth was registered by Royal Dutch/Shell (5%); Exxon, the largest of the majors, had little change; and Gulf Oil was the only major to experience a decline in capacity (3%).

Other international oil companies -- with equity in foreign production and/or refining operations -- have ownership of 9.4 million b/d, or 16% of Free World refining capacity. As a group, these firms have accounted for 23% of the additions to Free World capacity since 1 January 1974. All but one of these firms (Ultramar) have managed to retain or expand capacity in this period. The 11% growth in indigenous private ownership paralleled the growth of the smaller international firms. Private domestic investors have equity in 14.6 million b/d of refining capacity, 25% of the Free World total.

#### Government Ownership

The public sector represents the most rapidly growing segment of ownership of refining capacity, now constituting approximately one-sixth of the Free World

Free World Refining Capacity<sup>1</sup>

	1 January 1974		1 September 1975		Percent Increase
	Thousand b/d	Percent	Thousand b/d	Percent	
<b>Total</b>	<b>54,765</b>	<b>100.0</b>	<b>58,921</b>	<b>100.0</b>	<b>7.6</b>
Major international oil companies	24,740	45.2	25,321	43.0	2.3
Exxon Corp.	6,535	11.9	6,555	11.1	0.3
Royal Dutch/Shell	5,370	9.8	5,660	9.6	5.4
Texaco Inc.	3,075	5.6	3,190	5.4	3.7
British Petroleum Co.	2,825	5.2	2,923	5.0	3.5
Mobil Oil Corp.	2,505	4.6	2,544	4.3	1.6
Standard Oil Co. of California	2,465	4.5	2,536	4.3	2.9
Gulf Oil Corp.	1,965	3.6	1,913	3.2	-2.6
Other international oil companies	8,435	15.4	9,387	15.9	11.3
Indigenous private firms	13,130	24.0	14,577	24.7	11.0
Governments	8,460	15.4	9,636	16.4	13.9
OPEC	1,885	3.4	2,479	4.2	31.6
Non-OPEC	6,575	12.0	7,157	12.1	8.8

1. Calculated on basis of equity ownership.

total. Since 1 January 1974, government ownership of refinery capacity increased by 14%. About one-third of this increased public equity was achieved through nationalization measures and the remainder by public investment in plant construction and expansion.

OPEC countries, which provide two-thirds of the Free World supply of crude oil, house only 4.5 million b/d in refinery capacity, 8% of the Free World total. At maximum levels, the OPEC states are capable of processing about one-sixth of the 27 million b/d of crude they produced over the first 8 months of 1975. Only in Venezuela – the largest refining state in the cartel, with one-third of the OPEC capacity – can the refineries handle a major portion of national crude production.

Ownership patterns in OPEC countries are shifting markedly. Governments now have equity interest in 55% of refinery capacity, compared with 44% at the end of 1973. As of 1 January 1976, when Venezuela completes 100% of nationalization of its oil industry, OPEC governments will own 89% of the refining capacity within their borders.

British Petroleum Co. and Cie. Francaise des Petroles are treated as being within the private sector because they operate like private companies, notwithstanding the important government share in ownership.

### US Corporations

US companies occupy a commanding position in worldwide ownership of oil refineries, with a capacity of 28 million b/d, or 47% of the non-Communist total. The five US international majors alone own 28%. Although US companies are most dominant in the United States, where they own 92% of the capacity, they also own 32% of the total outside the United States - in Western Europe, 31%; Japan, 21%; and Canada, 49%.

### OPEC Countries: Crude Oil Refining Capacity 1 September 1975

	Thousand b/d	
	Total Capacity	Government Share
<b>Total</b>	<b>4,482</b>	<b>2,479</b>
Algeria	115	115
Ecuador	44	5
Gabon	17	1
Indonesia	424	424
Iran	789	807 <sup>1</sup>
Iraq	169	168
Kuwait	646	438
Libya	68	60
Nigeria	60	36
Qatar	7	7
Saudi Arabia	611	388
United Arab Emirates	....	....
Venezuela	1,532	30

1. Includes 18,000 b/d in India and South Africa.

### Refining Capacity Versus Sources of Crude

The seven majors, which own 43% of Free World refining capacity, have commitments for crude considerably in excess of their refining capacity. All majors own controlling equity in refineries in which minority shares are held by the public or local governments. In these cases, the majors provide most of the crude oil. In many refineries the majors have only part equity ownership but have supply contracts for all the crude oil. Under Japanese law, for example, local interests

must own at least 50% equity in domestic refineries. Japan has refining capacity of about 5.7 million b/d, of which the majors have a 1.2 million b/d equity share. They supply practically all of the crude oil for jointly owned refineries as well as substantial amounts for other facilities. They account for about 65% of all Japanese imports of crude oil.



## APPENDIX TABLES

Table 1

Free World: Crude Oil Refining Capacity, by Country  
1 September 1975

Location	Crude Capacity (Thousand Barrels Per Day)	Percent of Total
<b>Total</b> .....	<b>58,921.1</b>	<b>100.00</b>
<b>Eastern Hemisphere</b> .....	<b>34,162.1</b>	<b>57.98</b>
Middle East.....	2,965.8	5.03
Bahrain.....	250.0	0.42
Iran.....	789.0	1.34
Iraq.....	168.5	0.29
Israel.....	201.0	0.34
Jordan.....	21.2	0.04
Kuwait.....	646.0	1.10
Lebanon.....	53.5	0.09
Qatar.....	6.8	0.01
Saudi Arabia.....	611.0	1.04
South Yemen.....	169.1	0.29
Syria.....	49.7	0.08
Africa.....	1,289.0	2.19
Algeria.....	115.3	0.20
Angola.....	35.7	0.06
Egypt.....	180.0	0.31
Ethiopia.....	14.4	0.02
Gabon.....	17.0	0.03
Ghana.....	28.0	0.05
Ivory Coast.....	43.0	0.07
Kenya.....	80.0	0.14
Liberia.....	11.0	0.02
Libya.....	68.0	0.12
Malagasy Republic.....	15.0	0.03
Morocco.....	58.6	0.10
Mozambique.....	17.0	0.03
Nigeria.....	60.0	0.10
Republic of South Africa.....	397.1	0.67
Rhodesia.....	20.0	0.03
Senegal.....	15.0	0.03
Sierra Leone.....	10.0	0.02
Sudan.....	22.0	0.04
Tanzania.....	16.1	0.03
Tunisia.....	25.0	0.04
Zaire.....	16.2	0.03
Zambia.....	24.6	0.04
Far East and Oceania.....	9,890.4	16.79
Australia.....	722.1	1.23
Bangladesh.....	30.5	0.05
Burma.....	28.3	0.05
Cambodia.....	12.0	0.02
Guam.....	29.5	0.05
India.....	555.1	0.94
Indonesia.....	423.7	0.72
Japan.....	5,660.4	9.61
Malaysia.....	126.0	0.21
New Zealand.....	54.0	0.09
Pakistan.....	79.2	0.13
Philippines.....	274.0	0.47
Singapore.....	1,026.0	1.74
South Korea.....	425.0	0.72
Sri Lanka.....	34.4	0.06

Table 1

**Free World: Crude Oil Refining Capacity, by Country (Continued)**  
**1 September 1975**

Location	Crude Capacity (Thousand Barrels Per Day)	Percent of Total
<b>Eastern Hemisphere (Continued)</b>		
Far East and Oceania (Continued)		
Taiwan.....	244.0	0.42
Thailand.....	166.2	0.28
Western Europe.....	20,016.9	33.97
Austria.....	220.0	0.37
Belgium.....	1,093.8	1.86
Cyprus.....	15.0	0.02
Denmark.....	220.0	0.37
Finland.....	196.0	0.33
France.....	3,341.7	5.67
Greece.....	411.0	0.70
Ireland.....	56.0	0.10
Italy.....	3,952.7	6.71
Netherlands.....	1,970.5	3.34
Norway.....	258.0	0.44
Portugal.....	110.0	0.19
Spain.....	1,165.0	1.98
Sweden.....	413.0	0.70
Switzerland.....	138.0	0.23
Turkey.....	315.5	0.53
United Kingdom.....	2,873.0	4.88
West Germany.....	2,986.7	5.07
Yugoslavia.....	281.0	0.48
<b>Western Hemisphere.....</b>	<b>24,759.0</b>	<b>42.02</b>
North America.....	17,867.2	30.32
Canada.....	2,111.9	3.58
Mexico.....	760.0	1.29
United States.....	14,995.3	25.45
South America and Caribbean.....	6,891.8	11.70
Antigua.....	16.0	0.03
Argentina.....	720.5	1.22
Bahamas.....	500.0	0.85
Barbados.....	3.0	0.01
Bolivia.....	25.5	0.04
Brazil.....	961.8	1.63
Chile.....	123.5	0.21
Colombia.....	172.1	0.29
Costa Rica.....	11.0	0.02
Dominican Republic.....	45.5	0.08
Ecuador.....	44.4	0.08
El Salvador.....	14.0	0.02
Guatemala.....	24.8	0.04
Honduras.....	14.0	0.02
Jamaica.....	33.0	0.06
Martinique.....	10.4	0.02
Netherlands Antilles.....	900.0	1.53
Nicaragua.....	13.2	0.02
Panama.....	100.0	0.17
Paraguay.....	10.0	0.02
Peru.....	129.6	0.22
Puerto Rico.....	283.8	0.48
Trinidad and Tobago.....	461.0	0.78
Uruguay.....	43.0	0.07
Venezuela.....	1,531.7	2.60
Virgin Islands.....	700.0	1.19

Table 2

**Free World: Crude Oil Refining Capacity, by Ownership**  
**1 September 1975**

<b>Company</b>	<b>Crude Capacity (Thousand Barrels Per Day)</b>	<b>Percent of Total</b>
<b>Total</b> .....	<b>58,921.1</b>	<b>100.00</b>
International Majors.....	25,321.0	42.97
British Petroleum Co.....	2,922.9	4.96
Exxon Corp.....	6,554.7	11.12
Gulf Oil Corp.....	1,912.8	3.25
Mobil Oil Corp.....	2,544.4	4.32
Royal Dutch/Shell.....	5,660.4	9.61
Standard Oil Co. of California.....	2,535.6	4.30
Texaco Inc.....	3,190.2	5.42
Other Internationals.....	9,386.8	15.93
Amerada Hess Corp.....	728.5	1.24
Atlantic Richfield Co.....	855.2	1.45
Ashland Oil Inc.....	386.6	0.66
Burmah Oil Co., Ltd.....	125.8	0.22
Cie. Francaise Des Petroles.....	1,117.6	1.90
Continental Oil Co.....	473.3	0.80
Getty Oil Co.....	454.5	0.77
Marathon Oil Co.....	473.0	0.80
New England Petroleum Co.....	325.0	0.55
Petrofina S.A.....	555.4	0.94
Phillips Petroleum Co.....	502.1	0.85
Occidental Petroleum Corp.....	125.5	0.21
R. J. Reynolds Industries.....	135.0	0.23
Standard Oil Co. of Indiana.....	1,392.0	2.36
Sun Oil Co.....	656.4	1.11
Tesoro Petroleum Corp.....	135.6	0.23
Union Oil Co. of California.....	529.2	0.90
Ultramar Co., Ltd.....	128.0	0.22
Wintershall A.G.....	288.1	0.49
Governments (Govt. of).....	9,636.6	16.36
Algeria.....	115.3	0.20
Antigua.....	16.0	0.03
Argentina.....	475.8	0.81
Austria.....	220.0	0.37
Bolivia.....	25.5	0.04
Brazil.....	943.0	1.60
Burma.....	28.3	0.05
Cambodia.....	7.8	0.01
Cameroun.....	0.9	....
Central African Republic.....	0.9	....
Chad.....	0.9	....
Chile.....	123.5	0.21
Colombia.....	161.5	0.28
Congo.....	0.9	....
Costa Rica.....	11.0	0.02
Cyprus.....	5.4	0.01
Dominican Republic.....	15.0	0.03
Ecuador.....	5.0	0.01
Egypt.....	180.0	0.31
Ethiopia.....	14.4	0.02
Finland.....	196.0	0.33
France.....	568.4	0.97
Gabon.....	0.9	....
Ghana.....	14.0	0.02

Table 2

Free World: Crude Oil Refining Capacity, by Ownership (Continued)  
1 September 1975

Company	Crude Capacity (Thousand Barrels Per Day)	Percent of Total
Governments (Govt. of) (Continued)		
Greece.....	98.0	0.17
India.....	335.8	0.57
Indonesia.....	423.7	0.72
Iran.....	807.3	1.37
Iraq.....	168.5	0.29
Israel.....	128.6	0.22
Italy.....	713.3	1.21
Ivory Coast.....	4.3	0.01
Kenya.....	40.0	0.07
Kuwait.....	438.0	0.74
Lebanon.....	36.0	0.06
Libya.....	60.0	0.10
Malagasy Republic.....	2.3	....
Mexico.....	760.0	1.29
Morocco.....	54.3	0.09
Nigeria.....	36.0	0.06
Pakistan.....	12.6	0.02
Peru.....	129.6	0.22
Philippines.....	89.6	0.15
Portugal.....	123.5	0.21
Qatar.....	6.8	0.01
Republic of South Africa.....	33.1	0.06
Saudi Arabia.....	388.0	0.66
Sierra Leone.....	5.0	0.01
Singapore.....	21.7	0.04
South Korea.....	105.0	0.18
Spain.....	330.3	0.56
Sri Lanka.....	34.4	0.06
Syria.....	49.7	0.08
Taiwan.....	244.0	0.41
Tanzania.....	8.1	0.01
Thailand.....	66.2	0.11
Trinidad and Tobago.....	100.0	0.17
Tunisia.....	25.0	0.04
Turkey.....	225.5	0.38
Uruguay.....	43.0	0.07
Venezuela.....	30.0	0.05
West Germany.....	27.6	0.05
Yugoslavia.....	281.0	0.48
Zaire.....	8.1	0.01
Zambia.....	12.3	0.02
Local Private Capital.....	14,470.2	24.56
Argentina.....	20.8	0.03
Australia.....	55.0	0.09
Bangladesh.....	21.4	0.04
Brazil.....	18.8	0.03
Canada.....	641.6	1.09
Cyprus.....	2.2	....
Dominican Republic.....	15.5	0.03
Ecuador.....	14.8	0.03
France.....	685.1	1.16
Greece.....	276.5	0.47
Guam.....	29.5	0.05

Table 2

**Free World: Crude Oil Refining Capacity, by Ownership (Continued)**  
**1 September 1975**

Location	Crude Capacity (Thousand Barrels Per Day)	Percent of Total
Local Private Capital (Continued)		
Honduras.....	4.6	0.01
India.....	14.0	0.02
Israel.....	72.4	0.12
Italy.....	2,230.1	3.79
Japan.....	4,281.7	7.27
Jordan.....	21.2	0.04
Malaysia.....	19.9	0.03
Mozambique.....	17.0	0.03
Netherlands.....	6.5	0.01
New Zealand.....	17.0	0.03
Norway.....	60.3	0.10
Pakistan.....	33.6	0.06
Paraguay.....	10.0	0.02
Philippines.....	17.0	0.03
Puerto Rico.....	101.4	0.17
Republic of South Africa.....	3.1	....
Senegal.....	2.4	....
South Korea.....	107.5	0.18
Spain.....	655.3	1.11
Sweden.....	170.0	0.29
Thailand.....	45.5	0.08
Turkey.....	4.5	0.01
United Kingdom.....	58.5	0.10
United States.....	3,994.3	6.78
West Germany.....	741.2	1.26
Other.....	106.5	0.18

Table 3

## Free World: Crude Oil Refineries and Ownership, by Area

Refinery Name and Ownership	Location	Crude Capacity (Thousand Barrels Per Day)	Percent of Total
<b>Middle East</b> .....		<b>2,965.8</b>	<b>....</b>
Bahrain.....		250.0	100.00
Bahrain Petroleum Co.....	Awali	250.0	100.00
50.00% Standard Oil Co. of California			
50.00% Texaco Inc.			
<b>Iran</b> .....		<b>789.0</b>	<b>100.00</b>
National Iranian Oil Co.....	Abadan	470.0	59.57
100.00% Iranian Govt.			
National Iranian Oil Co.....	Kermanshah	15.0	1.90
100.00% Iranian Govt.			
National Iranian Oil Co.....	Masjid Sulaiman	64.0	8.11
100.00% Iranian Govt.			
National Iranian Oil Co.....	Shiraz	40.0	5.07
100.00% Iranian Govt.			
National Iranian Oil Co.....	Tehran	200.0	25.35
100.00% Iranian Govt.			
<b>Iraq</b> .....		<b>168.5</b>	<b>100.00</b>
Oil Refineries Administration.....	Basra	70.0	41.54
100.00% Iraqi Govt.			
Oil Refineries Administration.....	Daura	71.0	42.14
100.00% Iraqi Govt.			
Oil Refineries Administration.....	Haditha	7.0	4.15
100.00% Iraqi Govt.			
Oil Refineries Administration.....	Khanaqin	12.0	7.12
100.00% Iraqi Govt.			
Oil Refineries Administration.....	Mufthia	4.5	2.67
100.00% Iraqi Govt.			
Oil Refineries Administration.....	Qaiyarah	2.0	1.19
100.00% Iraqi Govt.			
Oil Refineries Administration.....	Kirkuk	2.0	1.19
100.00% Iraqi Govt.			
<b>Israel</b> .....		<b>201.0</b>	<b>100.00</b>
Oil Refineries Ltd.....	Ashdod	66.0	32.84
64.00% Israeli Govt.			
36.00% Oil Refineries Ltd.			
Oil Refineries Ltd.....	Haifa	135.0	67.16
64.00% Israeli Govt.			
36.00% Oil Refineries Ltd.			
<b>Jordan</b> .....		<b>21.2</b>	<b>100.00</b>
Jordan Petroleum Refinery Co.....	Zerqa	21.2	100.00
100.00% Jordan Petroleum Refining Co.			
<b>Kuwait</b> .....		<b>646.0</b>	<b>100.00</b>
American Independent Oil Co.....	Mena Abdullah	132.0	20.44
100.00% R. J. Reynolds Industries, Inc.			
Arabian Oil Ltd.....	Ras Al Khafji	30.0	4.64
80.00% Japanese Interests			
10.00% Kuwaiti Govt.			
10.00% Saudi Arabian Govt.			
Getty Oil Co.....	Mina Saud	50.0	7.74
100.00% Getty Oil Co.			
Kuwait National Petroleum Co.....	Shuaiba	134.0	20.74
100.00% Kuwaiti Govt.			
Kuwait Oil Co. Ltd.....	Mina Al Ahmadi	300.0	46.44
100.00% Kuwaiti Govt.			

Table 3

## Free World: Crude Oil Refineries and Ownership, by Area (Continued)

Refinery Name and Ownership	Location	Crude Capacity (Thousand Barrels Per Day)	Percent of Total
<b>Middle East (Continued)</b>			
Lebanon.....		53.5	100.00
Iraq Petroleum Co. Ltd.....	Tripoli	36.0	67.29
100.00% Lebanese Govt.			
Mediterranean Refining Co.....	Sidon	17.5	32.71
50.00% Mobil Oil Corp.			
25.00% Standard Oil Co. of California			
25.00% Texaco Inc.			
Qatar.....		6.8	100.00
National Oil Distribution Co.....	Umm Said	6.8	100.00
100.00% Qatar Govt.			
Saudi Arabia.....		611.0	100.00
Arabian American Oil Co.....	Ras Tanura	565.0	92.47
12.00% Exxon Corp.			
4.00% Mobil Oil Corp.			
60.00% Saudi Arabian Govt.			
12.00% Standard Oil Co. of California			
12.00% Texaco Inc.			
Jiddah Oil Refinery Co.....	Jiddah	31.0	5.07
100.00% Saudi Arabian Govt.			
Riyadh Oil Refinery.....	Riyadh	15.0	2.46
100.00% Saudi Arabian Govt.			
South Yemen.....		169.1	100.00
BP Refinery (Aden) Ltd.....	Little Aden	169.1	100.00
100.00% British Petroleum Co.			
Syria.....		49.7	100.00
Homs Petroleum Refining Co.....	Homs	49.7	100.00
100.00% Syrian Govt.			
<b>Africa.....</b>		<b>1,289.0</b>	<b>....</b>
Algeria.....		115.3	100.00
Sonatrach.....	Arzew	54.6	47.35
100.00% Algerian Govt.			
Sonatrach.....	El Borma	0.6	0.52
100.00% Algerian Govt.			
Sonatrach.....	Hassi Messaoud	3.1	2.69
100.00% Algerian Govt.			
Sonatrach.....	Maison Carree	57.0	49.44
100.00% Algerian Govt.			
Angola.....		35.7	100.00
Cabinda Gulf.....	Cabinda	2.8	7.84
100.00% Gulf Oil Corp.			
Cia. De Petroleos De Angola.....	Luanda	32.9	92.16
59.00% Petrofina S.A.			
41.00% Portuguese Govt.			
Egypt.....		180.0	100.00
Egyptian General Petroleum Corp.....	El Amiriya	26.0	14.44
100.00% Egyptian Govt.			
Egyptian General Petroleum Corp.....	Mex	120.0	66.67
100.00% Egyptian Govt.			
Egyptian General Petroleum Corp.....	Tanta	14.6	8.11
100.00% Egyptian Govt.			
Egyptian General Petroleum Corp.....	Others	19.4	10.78
100.00% Egyptian Govt.			
Ethiopia.....		14.4	100.00
Ethiopian Petroleum S.C.....	Assab	14.4	100.00
100.00% Ethiopian Govt.			

Table 3

## Free World: Crude Oil Refineries and Ownership, by Area (Continued)

Refinery Name and Ownership	Location	Crude Capacity (Thousand Barrels Per Day)	Percent of Total
<b>Africa (Continued)</b>			
Gabon .....		17.0	100.00
Soc. Equatoriale De Raffinage .....	Port Gentil	17.0	100.00
3.08% British Petroleum Co.			
5.00% Cameroun Govt.			
5.00% Central African Republic Govt.			
5.00% Chad Govt.			
18.75% Cie. Francaise Des Petroles			
5.00% Congo Govt.			
18.75% French Govt.			
5.00% Gabon Govt.			
2.50% Italian Govt.			
11.66% Mobil Oil Corp.			
3.27% Petrofina S.A.			
11.39% Royal Dutch/Shell			
5.60% Texaco Inc.			
Ghana .....		28.0	100.00
Ghanaian-Italian Petroleum Co. ....	Tema	28.0	100.00
50.00% Ghanaian Govt.			
50.00% Italian Govt.			
Ivory Coast .....		43.0	100.00
Soc. Ivoirienne De Raffinage .....	Abidjan	43.0	100.00
10.20% British Petroleum Co.			
13.00% Cie. Francaise Des Petroles			
1.00% Exxon Corp.			
25.00% French Govt.			
10.00% Ivory Coast Govt.			
18.20% Mobil Oil Corp.			
14.70% Royal Dutch/Shell			
7.90% Texaco Inc.			
Kenya .....		80.0	100.00
East African Oil Refineries Ltd. ....	Mombasa	80.0	100.00
12.75% British Petroleum Co.			
12.75% Exxon Corp.			
50.00% Kenya Govt.			
12.75% Royal Dutch/Shell			
5.87% Standard Oil Co. of California			
5.88% Texaco Inc.			
Liberia .....		11.0	100.00
Liberia Refining Co. ....	Monrovia	11.0	100.00
33.00% Hydrocarbons Research			
67.00% Sun Oil Co.			
Libya .....		68.0	100.00
Esso Standard Libya .....	Marsa El Brega	8.0	11.76
100.00% Exxon Corp.			
National Oil Corp. ....	Zavia	60.0	88.24
100.00% Libyan Govt.			
Malagasy Republic .....		15.0	100.00
Soc. Malagache De Raffinage .....	Tamatave	15.0	100.00
7.50% British Petroleum Co.			
7.50% Cie. Francaise Des Petroles			
15.00% Exxon Corp.			
35.00% French Govt.			
15.00% Malagasy Republic Govt.			
7.50% Royal Dutch/Shell			
6.25% Standard Oil Co. of California			
6.25% Texaco Inc.			



Table 3

## Free World: Crude Oil Refineries and Ownership, by Area (Continued)

Refinery Name and Ownership	Location	Crude Capacity (Thousand Barrels Per Day)	Percent of Total
<b>Africa (Continued)</b>		397.1	100.00
Morocco.....		58.6	100.00
Soc. Anon. Marocaine Italienne De Raffinage.....	Mohammedia	50.0	85.32
100.00% Moroccan Govt.			
Soc. Cherifienne Des Petroles.....	Sidi-Kacem	8.6	14.68
7.00% Cie. Francaise Des Petroles			
43.00% French Govt.			
50.00% Moroccan Govt.			
Mozambique.....		17.0	100.00
Soc. Nacional De Refinacao De Petroleos.....	Salazar	17.0	100.00
100.00% Soc. Nacional De Petroleos S.A.R.L.			
Nigeria.....		60.0	100.00
Nigerian Petroleum Refining Co. Ltd.....	Port Harcourt	60.0	100.00
20.00% British Petroleum Co.			
60.00% Nigerian Govt.			
20.00% Royal Dutch/Shell			
Republic of South Africa.....			
Caltex Oil S.A. (Pty) Ltd.....	Capetown	46.0	11.58
50.00% Standard Oil Co. of California			
50.00% Texaco Inc.			
Mobil Oil Refining Co.....	Durban	100.0	25.18
100.00% Mobil Oil Corp.			
National Petroleum Refiners of South Africa.....	Sasolburg	63.0	15.87
30.00% Cie. Francaise Des Petroles			
17.50% Iranian Govt.			
52.50% South African Govt.			
Satmar Ltd.....	Boksburg	3.1	0.78
100.00% Satmar Ltd.			
Shell and BP South African Petroleum Refineries.....	Durban	185.0	46.59
50.00% British Petroleum Co.			
50.00% Royal Dutch/Shell			
Rhodesia.....		20.0	100.00
Central African Petroleum Refineries, Ltd. (Not operating)....	Umtali	20.0	100.00
20.75% British Petroleum Co.			
5.00% Cie. Francaise Des Petroles			
5.00% Kuwait Govt.			
17.75% Mobil Oil Corp.			
15.00% R. J. Reynolds Industries			
20.75% Royal Dutch/Shell			
7.88% Standard Oil Co. of California			
7.87% Texaco Inc.			
Senegal.....		15.0	100.00
Soc. Africaine De Raffinage.....	Dakar	15.0	100.00
10.00% Banque Nat. De Development Du Senegal			
11.80% British Petroleum Co.			
11.80% Cie. Francaise Des Petroles			
1.00% Exxon Corp.			
24.00% French Govt.			
11.80% Mobil Oil Corp.			
11.80% Royal Dutch/Shell			
6.00% Soc. Africaine De Petroles			
11.80% Texaco Inc.			
Sierra Leone.....		10.0	100.00
Sierra Leone Petroleum Refinery Co.....	Freetown	10.0	100.00
6.90% British Petroleum Co.			
3.30% Italian Govt.			

Table 3

## Free World: Crude Oil Refineries and Ownership, by Area (Continued)

Refinery Name and Ownership	Location	Crude Capacity (Thousand Barrels Per Day)	Percent of Total
<b>Africa (Continued)</b>			
Sierra Leone (Continued)			
Sierra Leone Petroleum Refinery Co. (Continued)			
11.30% Mobil Oil Corp.			
17.70% Royal Dutch/Shell			
50.00% Sierra Leone Govt.			
10.80% Texaco Inc.			
Sudan.....		22.0	100.00
Shell and BP Sudan Ltd.....	Port Sudan	22.0	100.00
50.00% British Petroleum Co.			
50.00% Royal Dutch/Shell			
Tanzania.....		16.1	100.00
Tanzanian and Italian Petroleum Refinery, Co.....	Dar Es Salaam	16.1	100.00
50.00% Italian Govt.			
50.00% Tanzanian Govt.			
Tunisia.....		25.0	100.00
Soc. Tuniso Italienne De Raffinage.....	Bizerta	25.0	100.00
100.00% Tunisian Govt.			
Zaire.....		16.2	100.00
Soc. Zairo-Italienne De Raffinage.....	Muanda	16.2	100.00
50.00% Italian Govt.			
50.00% Zaire Govt.			
Zambia.....		24.6	100.00
Indeni Petroleum Refining Co., Ltd.....	Ndola	24.6	100.00
50.00% Italian Govt.			
50.00% Zambian Govt.			
<b>Far East and Oceania.....</b>		<b>9,890.4</b>	<b>....</b>
Australia.....		722.1	100.00
Amoco Australia Pty, Ltd.....	Brisbane	58.0	8.03
100.00% Standard Oil Co. of Indiana			
Ampol Refineries, Ltd.....	Lytton	60.0	8.31
91.60% Ampol Petroleum, Ltd			
4.20% Standard Oil Co. of California			
4.20% Texaco Inc.			
Australian Oil Refining Pty., Ltd.....	Kurnell	132.0	18.28
50.00% Standard Oil Co. of California			
50.00% Texaco Inc.			
BP Australia, Ltd.....	Westernport	57.0	7.89
100.00% British Petroleum Co.			
BP Refinery (Kwinana) Pty.....	Kwinana	103.0	14.26
100.00% British Petroleum Co.			
Petroleum Refineries (Australia), Ltd.....	Adelaide	46.5	6.44
35.00% Exxon Corp.			
65.00% Mobil Oil Corp.			
Petroleum Refineries (Australia) Ltd.....	Altona	98.6	13.66
35.00% Exxon Corp.			
65.00% Mobil Oil Corp.			
Shell Refining (Australia) Pty.....	Clyde	55.0	7.62
100.00% Royal Dutch/Shell			
Shell Refining (Australia) Pty.....	Geelong	92.0	12.74
100.00% Royal Dutch/Shell			
Total Refineries Australia, Ltd.....	Matrville	20.0	2.77
100.00% Cie. Francaise Des Petroles			
Bangladesh.....		30.5	100.00
Eastern Refinery, Ltd.....	Chittagong	30.5	100.00
30.00% Burmah Oil Co., Ltd			
70.00% Eastern Refinery, Ltd.			

Table 3

## Free World: Crude Oil Refineries and Ownership, by Area (Continued)

Refinery Name and Ownership	Location	Crude Capacity (Thousand Barrels Per Day)	Percent of Total
<b>Far East and Oceania (Continued)</b>			
Burma.....		28.3	100.00
Myanma Oil Corp.....	Chauk	6.8	24.03
100.00% Burmese Govt.			
Myanma Oil Corp.....	Syriam	21.5	75.97
100.00% Burmese Govt.			
Cambodia.....		12.0	100.00
Soc. Khmere De Raffinage.....	Sihanoukville	12.0	100.00
(Not operating)			
65.00% Cambodian Govt.			
35.00% French Govt.			
Guam.....		29.5	100.00
Guam Oil and Refining Co.....	Guam	29.5	100.00
100.00% Guam Oil and Refining Co.			
India.....		555.1	100.00
Assam Oil Co., Ltd.....	Digboi	12.1	2.18
100.00% Burmah Oil Co., Ltd			
Burmah-Shell Refineries, Ltd.....	Bombay	111.0	20.00
50.00% Burmah Oil Co., Ltd.			
50.00% Royal Dutch/Shell			
Caltex Oil Refining (India), Ltd.....	Visakhapatnam	32.0	5.77
50.00% Standard Oil Co. of California			
50.00% Texaco Inc.			
Cochin Refineries, Ltd.....	Cochin	66.0	11.89
21.20% Cochin Refineries, Ltd			
52.40% Indian Govt.			
26.40% Phillips Petroleum Corp.			
Hindustan Petroleum Corp. Ltd.....	Bombay	70.0	12.61
26.00% Exxon Corp.			
74.00% Indian Govt.			
Indian Oil Corp.....	Barauni	60.0	10.81
100.00% Indian Govt.			
Indian Oil Corp.....	Baroda	82.0	14.77
100.00% Indian Govt.			
Indian Oil Corp.....	Gauhai	16.0	2.88
100.00% Indian Govt.			
Indian Oil Corp.....	Haldia	50.0	9.00
100.00% Indian Govt.			
Madras Refineries, Ltd.....	Madras	56.0	10.09
74.00% Indian Govt.			
13.00% Iranian Govt.			
13.00% Standard Oil Co. of Indiana			
Indonesia.....		423.7	100.00
Pertamina.....	Balikpapan	75.0	17.70
100.00% Indonesian Govt.			
Pertamina.....	Dumai	100.0	23.60
100.00% Indonesian Govt.			
Pertamina.....	Pangkalan Plaju	4.5	1.06
100.00% Indonesian Govt.			
Pertamina.....	Plaju	111.2	26.25
100.00% Indonesian Govt.			
Pertamina.....	Sungei Gerong	79.0	18.65
100.00% Indonesian Govt.			
Pertamina.....	Sungei Pakning	50.0	11.80
100.00% Indonesian Govt.			
Pertamina.....	Wonokromo	4.0	0.94
100.00% Indonesian Govt.			

Table 3

## Free World: Crude Oil Refineries and Ownership, by Area (Continued)

Refinery Name and Ownership	Location	Crude Capacity (Thousand Barrels Per Day)	Percent of Total
<b>Far East and Oceania (Continued)</b>			
Japan.....		5,660.4	100.00
Asia Kyoseki.....	Sakaide	100.0	1.77
33.33% Kyodo Sekiyu K. K.			
52.00% Mitsubishi Chemical			
14.67% Mitsui and Co.			
Asia Oil Company.....	Hakodate	25.0	0.44
78.00% Mitsubishi Chemical			
22.00% Mitsui and Co.			
Asia Oil Company.....	Yokohama	100.0	1.77
78.00% Mitsubishi Chemical			
22.00% Mitsui and Co.			
Daikyo Oil.....	Yokkaichi	195.0	3.45
100.00% Daikyo Oil			
Fuji Kosan.....	Kainan	77.6	1.37
100.00% Fuji Kosan			
Fuji Oil.....	Sodegaura	210.0	3.71
100.00% Fuji Oil			
General Sekiyu Seisei.....	Kawasaki	55.0	0.97
50.00% Exxon Corp.			
50.00% General Bussan Kaisha			
General Sekiyu Seisei.....	Saikai	120.0	2.12
50.00% Exxon Corp.			
50.00% General Bussan Kaisha			
Idemitsu Kosan Co., Ltd.....	Tokuyama	140.0	2.47
100.00% Idemitsu Kosan Co., Ltd			
Idemitsu Kosan Co., Ltd.....	Chiba	310.0	5.48
100.00% Idemitsu Kosan Co., Ltd			
Idemitsu Kosan Co., Ltd.....	Hyogo	110.0	1.94
100.00% Idemitsu Kosan Co., Ltd			
Idemitsu Kosan Co., Ltd.....	Hokkaido	70.0	1.24
100.00% Idemitsu Kosan Co., Ltd.			
Kansai Oil Co.....	Sakai	110.0	1.94
85.00% Kansai Oil Co.			
15.00% Maruzen Oil Co.			
Kashima Oil.....	Kashima	180.0	3.18
100.00% Kashima Oil			
Koa Oil Co.....	Marifu	149.0	2.63
50.00% Koa Oil Co.			
25.00% Standard Oil Co. of California			
25.00% Texaco Inc.			
Koa Oil Co.....	Osaka	80.0	1.41
50.00% Koa Oil Co.			
25.00% Standard Oil Co. of California			
25.00% Texaco Inc.			
Kyokuto Petroleum Industries.....	Chiba	15.00	2.65
5.00% Kyokuto Petroleum Industries			
45.00% Mitsui and Co.			
50.00% Mobil Oil Corp.			
Kyushu Oil Co.....	Oita	170.0	3.00
100.00% Kyushu Oil Co.			
Maruzen Oil Co.....	Shimotsu	37.5	0.66
100.00% Maruzen Oil Co.			
Maruzen Oil Co.....	Matsuyama	50.0	0.88
100.00% Maruzen Oil Co.			

Table 3

## Free World: Crude Oil Refineries and Ownership, by Area (Continued)

Refinery Name and Ownership	Location	Crude Capacity (Thousand Barrels Per Day)	Percent of Total
<b>Far East and Oceania (Continued)</b>			
Japan (Continued)			
Maruzen Oil Co.....	Chiba	195.0	3.45
100.00% Maruzen Oil Co.			
Mitsubishi Oil Co., Ltd.....	Kawasaki	105.0	1.86
50.00% Getty Oil Co.			
50.00% Mitsubishi Oil Co., Ltd			
Mitsubishi Oil Co., Ltd.....	Mizushima	270.0	4.77
50.00% Getty Oil Co.			
50.00% Mitsubishi Oil Co., Ltd			
Nansei Sekiyu Kabushiki Kaisha.....	Nishihara, Okinawa	80.0	1.41
50.00% Exxon Corp.			
25.00% General Bussan Kaisha			
25.00% Nansei Sekiyu K.K.			
Nichimo Sekiyu Seisei.....	Kawasaki	100.0	1.77
17.50% Exxon Corp.			
17.50% Mobil Oil Corp.			
30.00% Nichimo Sekiyu Seisei			
35.00% Toa Nenryo Kogyo			
Nihonkai Oil Co.....	Toyama	60.0	1.06
100.00% Nihonkai Oil Co.			
Nippon Mining Co.....	Funakawa	14.2	0.25
100.00% Nippon Mining Co.			
Nippon Mining Co.....	Mizushima	235.2	4.16
100.00% Nippon Mining Co.			
Nippon Oil Co.....	Niigata	26.0	0.46
100.00% Nippon Oil Co.			
Nippon Petroleum Refining Co.....	Muroran	110.0	1.94
50.00% Nippon Oil Co.			
25.00% Standard Oil Co. of California			
25.00% Texaco Inc.			
Nippon Petroleum Refining Co.....	Yokohama	70.0	1.24
50.00% Nippon Oil Co.			
25.00% Standard Oil Co. of California			
25.00% Texaco Inc.			
Nippon Petroleum Refining Co.....	Negishi	330.0	5.83
50.00% Nippon Oil Co.			
25.00% Standard Oil Co. of California			
25.00% Texaco Inc.			
Nippon Petroleum Refining Co.....	Kudamatsu	42.0	0.74
50.00% Nippon Oil Co.			
25.00% Standard Oil Co. of California			
25.00% Texaco Inc.			
Okinawa Sekiyu Seisei Co., Ltd.....	Henza-jima, Okinawa	100.0	1.77
45.00% Gulf Oil Corp.			
45.00% Idemitsu Kosan			
10.00% Mitsubishi Chemical			
Seibu Oil.....	Yamaguchi	110.0	1.94
23.00% Japan Line			
20.00% Royal Dutch/Shell			
57.00% Seibu Oil			
Showa Oil Co., Ltd.....	Niigata	43.0	0.76
50.00% Royal Dutch/Shell			
50.00% Showa Oil Co., Ltd			

Table 3

## Free World: Crude Oil Refineries and Ownership, by Area (Continued)

Refinery Name and Ownership	Location	Crude Capacity (Thousand Barrels Per Day)	Percent of Total
<b>Far East and Oceania (Continued)</b>			
Japan (Continued)			
Showa Oil Co., Ltd..... 50.00% Royal Dutch/Shell 50.00% Showa Oil Co., Ltd	Kawasaki	149.0	2.63
Showa Yokkaichi Sekiyu Co..... 25.00% Mitsubishi Group 50.00% Royal Dutch/Shell 25.00% Showa Oil Co., Ltd.	Yokkaichi	310.0	5.48
Taiyo Oil Co., Ltd..... 100.00% Taiyo Oil Co., Ltd.	Kikuma	69.0	1.22
Teiseki Topping Plant..... 100.00% Teiseki Topping Plant	Kubiki	4.4	0.08
Toa Kyoseki Co., Ltd..... 100.00% Toa Kyoseki Co., Ltd	Nagoya	100.0	1.77
Toa Nenryo Kogyo..... 25.00% Exxon Corp. 25.00% Mobil Oil Corp. 50.00% Toa Nenryo Kogyo	Kawasaki	200.0	3.53
Toa Nenryo Kogyo..... 25.00% Exxon Corp. 25.00% Mobil Oil Corp. 50.00% Toa Nenryo Kogyo	Shimizu	43.5	0.77
Toa Nenryo Kogyo..... 25.00% Exxon Corp. 25.00% Mobil Oil Corp. 50.00% Toa Nenryo Kogyo	Wakayama	187.0	3.30
Toa Oil Co., Ltd..... 10.00% Japan Line 90.00% Toa Oil Co., Ltd.	Kawasaki	100.0	1.77
Toho Oil Co., Ltd..... 33.3% Idemitsu Kosan Co. 33.3% Mitsubishi Group 33.4% Toho Oil Co., Ltd	Owase	40.0	0.71
Tohoku Oil Co..... 20.00% Getty Oil Co. 20.00% Mitsubishi Oil Co., Ltd. 60.00% Tohoku Oil Co.	Senda	100.0	1.77
Toyo Petroleum Refining Co..... 33.8% Nippon Oil Co. 17.0% Texaco Inc. 32.2% Toyo Petroleum Refining Co. 17.00% Standard Oil Co. of California	Nakagusuku, Okinawa	28.0	0.48
Malaysia.....		126.0	100.00
Esso Malaysia Berhad..... 35.00% Esso Malaysia Berhad 65.00% Exxon Corp.	Port Dickson	35.0	27.78
Sarawak Shell Oilfields, Ltd..... 100.00% Royal Dutch/Shell	Lutong	60.0	47.62
Shell Refining Co., Ltd., Malaya..... 75.00% Royal Dutch/Shell 25.00% Shell Refining Co., Ltd., Malaya	Port Dickson	31.0	24.60

Table 3

## Free World: Crude Oil Refineries and Ownership, by Area (Continued)

Refinery Name and Ownership	Location	Crude Capacity (Thousand Barrels Per Day)	Percent of Total
<b>Far East and Oceania (Continued)</b>			
New Zealand.....		54.0	100.00
New Zealand Refining Co., Ltd.....	Marsden Point	54.0	100.00
23.57% British Petroleum Co.			
19.20% Mobil Oil Corp.			
31.52% New Zealand Refining Co., Ltd			
17.14% Royal Dutch/Shell			
4.28% Standard Oil Co. of California			
4.29% Texaco Inc.			
Pakistan.....		79.2	100.00
Attock Oil Co., Ltd.....	Rawalpindi	11.6	14.65
100.00% Attock Oil Co., Ltd.			
National Refinery, Ltd.....	Korangi	12.6	15.91
100.00% Pakistani Govt.			
Pakistan Refinery, Ltd.....	Karachi	55.0	69.44
15.00% Burmah Oil Co., Ltd			
18.00% Exxon Corp.			
40.00% Pakistan Refinery, Ltd.			
15.00% Royal Dutch/Shell			
6.00% Standard Oil Co. of California			
6.00% Texaco Inc.			
Philippines.....		274.0	100.00
Bataan Refining Corp.....	Limax	108.0	39.42
43.00% Mobile Oil Corp.			
57.00% Philippines Govt.			
Caltex (Philippines) Inc.....	Batangas	70.0	25.55
50.00% Standard Oil Co. of California			
50.00% Texaco Inc.			
Philippines National Oil Co.....	Rosa Rio	28.0	10.22
100.00% Philippines Govt.			
Shell Philippines Inc.....	Batangas	68.0	24.81
75.00% Royal Dutch/Shell			
25.00% Shell Philippines Inc.			
Singapore.....		1,026.0	100.00
BP Refinery Singapore.....	Tanjong Berlayer	26.0	2.53
100.00% British Petroleum Co.			
Esso Singapore Private, Ltd.....	Pulau Ayer Chawan	230.0	22.41
100.00% Exxon Corp.			
Mobil Oil Malaya.....	Jurong Industrial Estate	175.0	17.06
100.00% Mobile Oil Corp.			
Shell Eastern Petroleum, Ltd.....	Pulau Bukum	530.0	51.66
100.00% Royal Dutch/Shell			
Singapore Petroleum Co.....	Pulau Merlimau	65.0	6.34
33.34% Singapore Govt.			
33.33% Standard Oil Co. of Indiana			
33.33% Summit Industrial Corp.			
South Korea.....		425.0	100.00
Honam Oil Refinery Co., Ltd.....	Yosu	160.0	37.65
50.00% Lucky Chemical Co.			
25.00% Standard Oil Co. of California			
25.00% Texaco Inc.			
Korea Oil Corp.....	Ulsan	210.0	49.41
50.00% Gulf Oil Corp.			
50.00% Korean Govt.			
Kyungin Energy Co.....	Inchon	55.0	12.94
50.00% Korea Explosives Co.			
50.00% Union Oil Co. of California			

Table 3

## Free World: Crude Oil Refineries and Ownership, by Area (Continued)

Refinery Name and Ownership	Location	Crude Capacity (Thousand Barrels Per Day)	Percent of Total
<b>Far East and Oceania (Continued)</b>			
Sri Lanka.....		34.4	100.00
Ceylon Petroleum Corp.....	Sapugaskanda	34.4	100.00
100.00% Sri Lanka Govt.			
Taiwan.....		244.0	100.00
Chinese Petroleum Corp.....	Kaohsiung	244.0	100.00
100.00% Taiwanese Govt.			
Thailand.....		166.2	100.00
Defense Energy Department.....	Bangkok	65.0	39.11
100.00% Thailand Govt.			
Defense Energy Department.....	Chieng Mai	1.2	0.72
100.00% Thailand Govt.			
Esso Standard Thailand, Ltd.....	Srirachi	35.0	21.06
100.00% Exxo Corp.			
Thai Oil Refinery Co., Ltd.....	Srirachi	65.0	39.11
30.00% Royal Dutch/Shell			
70.00% Thai Oil Refinery Co., Ltd.			
<b>Western Europe.....</b>		<b>20,016.9</b>	<b>....</b>
Austria.....		220.0	100.00
OMV A/G.....	Schwechat	220.0	100.00
100.00% Austrian Govt.			
Belgium.....		1,093.8	100.00
Albatros S/A.....	Antwerp	120.0	10.97
100.00% Wintershall A/G			
Belgian Shell S/A.....	Ghent	9.4	0.86
100.00% Royal Dutch/Shell			
Chevron Belgium.....	Feluy	140.0	12.80
100.00% Standard Oil Co. of California			
Esso Belgium N.V.....	Antwerp	265.0	24.23
100.00% Exxon Corp.			
Raffinerie Belge Des Petroles.....	Antwerp	98.0	8.96
100.00% Occidental Petroleum Corp.			
Societe Industrielle Belge Des Petroles.....	Antwerp	321.4	29.38
50.00% British Petroleum Co.			
50.00% Petrofina S.A.			
Texaco Belgium N.V.....	Ghent	140.0	12.80
100.00% Texaco Inc.			
Cyprus.....		15.0	100.00
Cyprus Petroleum Refinery, Ltd.....	Larnaca	15.0	100.00
15.00% British Petroleum Co.			
35.00% Cyprus Govt.			
20.00% Mobil Oil Corp.			
15.00% Petrolina Marketing Co.			
15.00% Royal Dutch/Shell			
Denmark.....		220.0	100.00
Dansk Esso.....	Kalundborg	71.0	32.27
100.00% Exxon Corp.			
Dansk Shell.....	Fredericia	59.0	26.82
100.00% Royal Dutch/Shell			
Gulf Oil Refining A/S.....	Stigsnaes	90.0	40.91
100.00% Gulf Oil Corp.			
Finland.....		196.0	100.00
Neste OY.....	Naantali	56.0	28.57
100.00% Finnish Govt.			
Neste OY.....	Porvoo	140.0	71.43
100.00% Finnish Govt.			



Table 3

## Free World: Crude Oil Refineries and Ownership, by Area (Continued)

Refinery Name and Ownership	Location	Crude Capacity (Thousand Barrels Per Day)	Percent of Total
<b>Western Europe (Continued)</b>			
France.....		3,341.7	100.00
Antar Petroles De l'Atlantique.....	Donges	143.0	4.28
24.00% Cie. Francaise Des Petroles			
51.00% French Govt.			
5.00% Pechelbronn S.A.			
10.00% Standard Oil Co. of California			
10.00% Texaco Inc.			
Antar Petroles De l'Atlantique.....	Valenciennes	62.0	1.86
24.00% Cie. Francaise Des Petroles			
51.00% French Govt.			
5.00% Pechelbronn S.A.			
10.00% Standard Oil Co. of California			
10.00% Texaco Inc.			
Antar Petroles De l'Atlantique.....	Vern-Sur-Seiche	26.0	0.78
24.00% Cie. Francaise Des Petroles			
51.00% French Govt.			
5.00% Pechelbronn S.A.			
10.00% Standard Oil Co. of California			
10.00% Texaco Inc.			
Cie. Francaise De Raffinage.....	Gonfreville	484.0	14.48
55.00% Cie. Francaise Des Petroles			
45.00% Cie. Francaise De Raffinage			
Cie. Francaise De Raffinage.....	La Mede	212.0	6.34
55.00% Cie. Francaise Des Petroles			
45.00% Cie. Francaise De Raffinage			
Cie. Francaise De Raffinage.....	Mardy, Dunkerque	125.0	3.74
55.00% Cie. Francaise Des Petroles			
45.00% Cie. Francaise De Raffinage			
Cie. Rhenane De Raffinage.....	Reichstett-Vendenheim	75.0	2.24
6.00% French Govt.			
5.00% Mobil Oil Corp.			
85.00% Royal Dutch Shell			
2.00% Standard Oil Co. of California			
2.00% Texaco Inc.			
Elf Union.....	Feyzin	178.0	5.33
100.00% French Govt.			
Elf Union Industrielle Des Petroles.....	Bec d'Ambes	43.0	1.29
60.00% French Govt.			
20.00% Standard Oil Co. of California			
20.00% Texaco Inc.			
Elf Union Industrielle Des Petroles.....	Gargenville	136.0	4.07
60.00% French Govt.			
20.00% Standard Oil Co. of California			
20.00% Texaco Inc.			
Elf Union Industrielle Des Petroles.....	Grandpuits	75.0	2.24
60.00% French Govt.			
20.00% Standard Oil Co. of California			
20.00% Texaco Inc.			
Esso Standard SAF.....	Bordeaux	60.0	1.80
18.4% Gulf Oil Corp.			
18.4% Esso Standard SAF			
63.2% Exxon Corp.			
Esso Standard SAF.....	Fos-Sur-Mer	170.0	5.09
18.4% Gulf Oil Corp.			
18.4% Esso Standard SAF			
63.2% Exxon Corp.			

Table 3

## Free World: Crude Oil Refineries and Ownership, by Area (Continued)

Refinery Name and Ownership	Location	Crude Capacity (Thousand Barrels Per Day)	Percent of Total
<b>Western Europe (Continued)</b>			
France (Continued)			
Esso Standard SAF..... 18.4% Gulf Oil Corp. 18.4% Esso Standard SAF 63.2% Exxon Corp.	Port Jerome	150.0	4.49
Mobil Oil Francaise..... 100.00% Mobil Oil Corp.	Frontignan	120.0	3.59
Mobil Oil Francaise..... 100.00% Mobil Oil Corp.	Gravenchon	72.5	2.17
Raffinerie De Strasbourg..... 33.33% British Petroleum Co. 41.33% Cie. Francaise Des Petroles 17.01% French Govt. 1.67% Pechelbronn, S.A. 3.33% Standard Oil Co. of California 3.33% Texaco Inc.	Herrlisheim	95.0	2.84
Shell Francaise..... 86.5% Royal Dutch/Shell 13.5% Shell Francaise	Berre l'Etang	285.0	8.53
Shell Francaise..... 86.5% Royal Dutch/Shell 13.5% Shell Francaise	Pauillac	90.0	2.69
Shell Francaise..... 86.5% Royal Dutch/Shell 13.5% Shell Francaise	Petit Couronne	200.0	5.99
Soc. Francaise Des Petroles BP..... 70.00% British Petroleum Co. 30.00% Soc. Francaise Des Petroles BP	Dunkirk	118.8	3.55
Soc. Francaise Des Petroles BP..... 70.00% British Petroleum Co. 30.00% Soc. Francaise Des Petroles BP	Lavera	243.2	7.29
Soc. Francaise Des Petroles BP..... 70.00% British Petroleum Co. 30.00% Soc. Francaise Des Petroles BP	Vernon	73.2	2.19
Soc. De La Raffinerie De Lorraine..... 23.00% Cie. Francaise De Raffinage 28.00% Cie. Francaise Des Petroles 40.00% Exxon Corp. 9.00% French Govt.	Haveconcourt	105.0	3.13
Greece.....		411.0	100.00
Hellenic Aspropyrgos Refinery..... 100.00% Greek Govt.	Aspropyrgos	98.0	23.85
Motor Oil (Hellas) Corinth Ref..... 100.00% Vardinoyannis Group	Corinth	140.0	34.06
Petrola Hellas SA..... 100.00% Latsis Group	Eleusis	100.0	24.33
Thessaloniki Refining Co..... 50.00% Exxon Corp. 50.00% Thomas A. Pappas	Thessaloniki	73.0	17.76
Ireland.....		56.0	100.00
Irish Refining Co., Ltd..... 16.00% British Petroleum Co. 40.00% Exxon Corp. 24.00% Royal Dutch/Shell 20.00% Texaco Inc.	White Gate	56.0	100.00

Table 3

## Free World: Crude Oil Refineries and Ownership, by Area (Continued)

Refinery Name and Ownership	Location	Crude Capacity (Thousand Barrels Per Day)	Percent of Total
<b>Western Europe (Continued)</b>			
Italy.....		3,952.7	100.00
Amoco Italia.....	Cremona	100.0	2.53
100.00% Standard Oil Co. of Indiana			
Anic SPA.....	Gela	90.0	2.28
27.00% Anic SPA			
73.00% Italian Govt. (ENI)			
Anic SPA.....	Sannazzaro d'Burgondi	122.0	3.09
27.00% Anic SPA			
73.00% Italian Govt. (ENI)			
Anonima Petroli Italiana.....	Falconara Marittima	81.0	2.05
100.00% Anonima Petroli Italiana			
ERG-Raff. Edoardo Garrone.....	Genoa	147.0	3.72
100.00% ERG-Raff. Edoardo Garrone			
Esso Italiana.....	Augusta	210.0	5.31
100.00% Exxon Corp.			
Gaeta Industrie Petroli.....	Gaeta	39.9	1.00
100.00% Attilio Monti Group			
Gulf Italiana.....	Bertonica	80.0	2.02
75.00% Gulf Oil Corp.			
25.00% Mobil Oil Corp.			
Industrie Chimiche Italiane Del Petrolio.....	Mantova	65.0	1.64
100.00% Cie. Francaise Des Petroles			
Industria Italiana Petroli.....	La Spezia	103.0	2.61
100.00% Italian Govt. (ENI)			
Industria Italiana Petroli.....	Rho	80.0	2.02
100.00% Italian Govt. (ENI)			
Industria Italiana Petroli.....	Taranto	88.0	2.23
100.00% Italian Govt. (ENI)			
Industria Leganti Stradali Del Affini.....	Como	7.9	0.20
100.00% Industria Leganti Stradali Del Affini			
Industria Raffinazione Olii Minerali.....	Porto Marghera	110.0	2.78
49.00% Attilio Monti Group			
51.00% Italian Govt. (ENI)			
Iplom-Raffineria Petroli.....	Sarissola	31.2	0.79
100.00% Iplom-Raffineria Petroli			
Liquichimica SPA.....	Milan	12.0	0.30
100.00% Liquichimica SPA			
Lombarda Petroli.....	Villasanta	23.5	0.60
20.00% Cie. Francaise Des Petroles			
80.00% Lombarda Petroli			
Mediterranea SPA.....	Milazzo	505.0	12.78
100.00% Mediterranea SPA			
Mobil Oil Italiana.....	Naples	130.0	3.29
100.00% Mobil Oil Corp.			
Montedison SPA.....	Brindisi	30.0	0.76
100.00% Montedison SPA			
Montedison SPA.....	Priolo	300.0	7.59
100.00% Montedison SPA			
Raffineria Dellepiane.....	Genoa	20.0	0.51
100.00% Raffineria Dellepiane			
Raffineria Di Roma.....	Rome	80.3	2.03
20.0% Cie. Francaise Des Petroles			
57.5% Petrofina S.A.			
22.5% Standard Oil Co. of California			

Table 3

## Free World: Crude Oil Refineries and Ownership, by Area (Continued)

Refinery Name and Ownership	Location	Crude Capacity (Thousand Barrels Per Day)	Percent of Total
<b>Western Europe (Continued)</b>			
Italy (Continued)			
Raffineria Olii Lubricanti.....	Viguzzola	1.4	0.04
100.00% Raffineria Olii Lubricanti			
Sanquirico SPA.....	Genoa	32.5	0.82
100.00% Sanquirico SPA			
Saras SPA.....	Sarroch	360.0	9.11
100.00% Saras SPA			
Sarom Raffinazione SPA.....	Ravenna	332.0	8.40
100.00% Sarom Raffinazione SPA			
Sarpom.....	Novara	235.0	5.95
64.00% Exxon Corp.			
26.00% Standard Oil Co. of California			
10.00% Texaco Inc.			
Societa Italiana Resine SPA.....	Porto Torres	118.8	3.01
100.00% Soc. Italiana Resine			
Societa Petrolifera Italiana.....	La Spezia	18.4	0.47
53.00% Phillips Petroleum Co.			
47.00% Soc. Petrolifera Italiana			
Stanic SPA.....	Bari	90.0	2.28
50.00% Exxon Corp.			
50.00% Italian Govt. (ENI)			
Stanic SPA.....	Livorno	125.0	3.16
50.00% Exxon Corp.			
50.00% Italian Govt. (ENI)			
Total Italiana-Aquila.....	Trieste	111.0	2.81
100.00% Cie. Francaise Des Petroles			
Volpiano Refinery.....	Volpiano	72.8	1.82
100.00% Attilio Monti Group			
Netherlands.....		1,970.5	100.00
BP Raffinaderij Nederland.....	Rotterdam	490.0	24.87
100.00% British Petroleum Co., Ltd.			
Chevron Petroleum Maatschappij.....	Pernis	300.0	15.22
68.4% Standard Oil Co. of California			
31.6% Texaco Inc.			
Esso Nederland B.V.....	Rotterdam	325.0	16.49
100.00% Exxon Corp.			
Gulf Oil Raffinaderij.....	Europoort	94.0	4.77
100.00% Gulf Oil Corp.			
Mobil Oil B.V.....	Amsterdam	125.0	6.34
100.00% Mobil Oil Corp.			
Shell Nederland Raffinaderij.....	Pernis	500.0	25.37
100.00% Royal Dutch/Shell			
Smid and Hollander N.V.....	Amsterdam	6.5	0.33
100.00% Smid and Hollander N.V.			
Total Raffinaderij Nederland N.V.....	Flushing	130.0	6.61
100.00% Cie. Francaise Des Petroles			
Norway.....		258.0	100.00
Norsk Esso A/S.....	Slagen	110.0	42.64
100.00% Exxon Corp.			
Norsk Esso A/S.....	Vallo	3.0	1.16
100.00% Exxon Corp.			
Norsk Shell A/S.....	Stavanger	55.0	21.32
100.00% Royal Dutch/Shell			

Table 3

## Free World: Crude Oil Refineries and Ownership, by Area (Continued)

Refinery Name and Ownership	Location	Crude Capacity (Thousand Barrels Per Day)	Percent of Total
<b>Western Europe (Continued)</b>			
Norway (Continued)			
Raffinor A/S.....	Mongstad	90.0	34.88
33.00% British Petroleum Co.			
60.00% Norsk Hydro (51% Govt.)			
7.00% Raffinor A/S			
Portugal.....		110.0	100.00
Sacor.....	Lisbon	40.0	36.36
100.00% Portuguese Govt.			
Sacor.....	Oporto	70.0	63.64
100.00% Portuguese Govt.			
Spain.....		1,165.0	100.00
Asfalto Espanoles S.A.....	Tarragona	18.0	1.55
50.00% Cia. Arrendaria Del Petroleos			
50.00% Cia. Espanola De Petroleos			
Cia. Espanola De Petroleos.....	Algeciras	160.0	13.73
100.00% Cia. Espanola De Petroleos			
Cia. Espanola De Petroleos.....	Santa Cruz De Tenerife, C.I.	175.0	15.02
100.00% Cia. Espanola De Petroleos			
Cia. Iberica Refinadora De Petroleos.....	La Coruna	120.0	10.30
4.00% Cia. Espanola De Petroleos			
16.00% Cia. Iberica Ref. De Petroleos			
28.00% Marathon Oil Co.			
52.00% Spanish Govt.			
Empresa Nacional De Refino.....	Esecombreras	220.0	18.88
72.00% Spanish Govt.			
6.00% Spanish Private Interests			
11.00% Standard Oil Co. of California			
11.00% Texaco Inc.			
Empresa Nacional De Refino.....	Puertollano	152.0	13.05
72.00% Spanish Govt.			
6.00% Spanish Private Interests			
11.00% Standard Oil Co. of California			
11.00% Texaco Inc.			
Esso Petroleos Espanoles.....	Castellon De La Plana	80.0	6.87
100.00% Banco Espanol De Credito			
Refineria De Petroleos Del Norte.....	Bilbao	160.0	13.73
30.00% Cia. Arrendaria Del Petroleos			
40.00% Gulf Oil Corp.			
30.00% Spanish Private Interests			
Union Explosivos Rio Tinto.....	Huelva	80.0	6.87
100.00% Union Explosivos Rio Tinto			
Sweden.....		413.0	100.00
BP Raffinaderi A/B.....	Gothenburg	110.0	26.63
100.00% British Petroleum Co.			
Koppertrans Olje A/B.....	Gothenburg	100.0	24.21
100.00% Royal Dutch/Shell			
Nynas Petroleum A/B.....	Gothenburg	5.7	1.38
100.00% Nynas Petroleum A/B			
Nynas Petroleum A/B.....	Malmo	3.8	0.92
100.00% Nynas Petroleum A/B			
Nynas Petroleum A/B.....	Nynasham	28.5	6.90
100.00% Nynas Petroleum A/B			
Scandinaviska Raffinaderi A/B.....	Lysekil	165.0	39.96
80.0% Swedish Cooperative			
20.0% Texaco Inc.			

Table 3

## Free World: Crude Oil Refineries and Ownership, by Area (Continued)

Refinery Name and Ownership	Location	Crude Capacity (Thousand Barrels Per Day)	Percent of Total
<b>Western Europe (Continued)</b>			
Switzerland.....		138.0	100.00
Raffinerie De Cressier.....	Cressier	65.0	47.10
25.00% Gulf Oil Corp.			
75.00% Royal Dutch/Shell			
Raffinerie Du Sud-Ouest.....	Collombey	73.0	52.90
24.40% British Petroleum Co.			
3.00% Cie. Francaise Des Petroles			
41.50% Exxon Corp.			
21.80% Italian Govt.			
3.30% Petrofina S.A.			
6.00% Texaco Inc.			
Turkey.....		315.5	100.00
Anadolu Tasfiyehanesi AS.....	Mersin	90.0	28.53
17.00% British Petroleum Co.			
5.00% Marmara Refining Co.			
51.00% Mobil Oil Corp.			
27.00% Royal Dutch/Shell			
Istanbul Petrol Rafinerisi AS.....	Izmit	140.0	44.37
100.00% Turkish Govt.			
Turkish Petroleum Co.....	Aliaga-Izmir	62.7	19.87
100.00% Turkish Govt.			
Turkish Petroleum Co.....	Batman	22.8	7.23
100.00% Turkish Govt.			
United Kingdom.....		2,873.0	100.00
Amoco (U.K.) Ltd.....	Milford Haven	90.0	3.13
100.00% Standard Oil Co. of Indiana			
Berry Wiggins and Co., Ltd.....	Kingsnorth on the Medway	2.0	0.07
100.00% Berry Wiggins & Co., Ltd.			
BP Refinery (Grangemouth).....	Grangemouth	186.2	6.48
100.00% British Petroleum Co.			
BP Refinery (Kent).....	Isle of Grain	229.9	8.00
100.00% British Petroleum Co.			
BP Refinery (Northern Ireland).....	Belfast	32.3	1.12
100.00% British Petroleum Co.			
BP Refinery, Ltd.....	Llandarcy, Neath	174.8	6.08
100.00% British Petroleum Co.			
Burmah-Castrol Co.....	Ellesmere Port	25.3	0.88
100.00% Burmah Oil Co., Ltd.			
Conoco Ltd.....	South Killingholme	87.5	3.05
100.00% Continental Oil Co.			
Esso Petroleum Co. Ltd.....	Fawley	391.0	13.61
100.00% Exxon Corp.			
Esso Petroleum Co. Ltd.....	Milford Haven	309.0	10.76
100.00% Exxon Corp.			
Gulf Oil Refining Ltd.....	Milford Haven	103.0	3.59
100.00% Gulf Oil Corp.			
Lindsey Oil Refinery Ltd.....	Killingholme	189.0	6.58
50.00% Cie. Francaise Des Petroles			
50.00% Petrofina, S.A.			
Mobil Oil Co. Ltd.....	Coryton	175.0	6.09
100.00% Mobil Oil Corp.			
Phillips Imperial Petroleum Ltd.....	North Tees	100.0	3.48
50.00% Imperial Chemical Industries			
50.00% Phillips Petroleum Co.			

Table 3

## Free World: Crude Oil Refineries and Ownership, by Area (Continued)

Refinery Name and Ownership	Location	Crude Capacity (Thousand Barrels Per Day)	Percent of Total
<b>Western Europe (Continued)</b>			
United Kingdom (Continued)			
Philmac Oils Ltd. ....	Eastham	13.0	0.45
50.00% Phillips Petroleum Co.			
50.00% Tarmac Derby Ltd.			
Shell U.K. Ltd. ....	Ardrossan	6.0	0.21
100.00% Royal Dutch/Shell			
Shell U.K. Ltd. ....	Heysham	39.0	1.36
100.00% Royal Dutch/Shell			
Shell U.K. Ltd. ....	Shell Haven	200.0	6.96
100.00% Royal Dutch/Shell			
Shell U.K. Ltd. ....	Stanlow	215.0	7.48
100.00% Royal Dutch/Shell			
Shell U.K. Ltd. ....	Tees Port	125.0	4.35
100.00% Royal Dutch/Shell			
Texaco Ltd. ....	Pembroke	180.0	6.27
100.00% Texaco Inc.			
Yugoslavia. ....		281.0	100.00
INA Industria Nafte Zagreb. ....	Rijeka	96.0	34.16
100.00% Yugoslav Govt.			
INA Industria Nafte Zagreb. ....	Sisak	77.0	27.40
100.00% Yugoslav Govt.			
Nafta Gas Corp. Novi Sad. ....	Novi Sad	12.0	4.27
100.00% Yugoslav Govt.			
Nafta Gas Corp. Pancevo. ....	Pancevo	30.0	10.68
100.00% Yugoslav Govt.			
Rafinerija Nafte Bosanski. ....	Bosanski Brod	54.0	19.22
100.00% Yugoslav Govt.			
Rafinerija Nafte Lendava. ....	Lendava	12.0	4.27
100.00% Yugoslav Govt.			
West Germany. ....		2,986.7	100.00
Caltex Deutschland. ....	Raunheim	90.0	3.01
50.00% Standard Oil Co. of California			
50.00% Texaco Inc.			
Deutsche BP. ....	Dinslaken	203.3	6.81
100.00% British Petroleum Co.			
Deutsche BP. ....	Hamburg	103.9	3.48
100.00% British Petroleum Co.			
Deutsche BP. ....	Vohburg	104.5	3.50
100.00% British Petroleum Co.			
Deutsche Marathon. ....	Burghausen	70.0	2.34
100.00% Marathon Oil Co.			
Deutsche Shell. ....	Godorf	165.0	5.52
100.00% Royal Dutch/Shell			
Deutsche Shell. ....	Harburg-Grasbrook	85.0	2.85
100.00% Royal Dutch/Shell			
Deutsche Shell. ....	Ingolstadt	55.0	1.84
100.00% Royal Dutch/Shell			
Deutsche Shell. ....	Monheim	7.0	0.23
100.00% Royal Dutch/Shell			
Deutsche Texaco. ....	Heide	105.0	3.52
100.00% Texaco Inc.			
Erdol Raffinerie Duisburg. ....	Duisburg	37.8	1.27
20.00% Cie. Francaise Des Petroles			
80.00% Petrofina S.A.			

Table 3

## Free World: Crude Oil Refineries and Ownership, by Area (Continued)

Refinery Name and Ownership	Location	Crude Capacity (Thousand Barrels Per Day)	Percent of Total
<b>Western Europe (Continued)</b>			
West Germany (Continued)			
Erdol Raffinerie Ingolstadt.....	Ingolstadt	130.0	4.35
50.00% Italian Govt.			
50.00% Veba A.G.			
Erdol Raffinerie Mannheim.....	Mannheim	113.5	3.82
40.00% Marathon Oil Co.			
60.00% Wintershall A.G.			
Erdol Raffinerie Neustadt.....	Neustadt-Donau	144.0	4.82
50.00% Mobil Oil Corp.			
50.00% Veba A.G.			
Erdol Raffinerie Speyer.....	Speyer	57.8	1.91
75.00% French Govt.			
25.00% Veba A.G.			
Erdolwerke Frisia.....	Emden	47.5	1.59
100.00% Veba A.G.			
Esso A.G.....	Cologne	115.0	3.85
100.00% Exxon Corp.			
Esso A.G.....	Hamburg	110.0	3.68
100.00% Exxon Corp.			
Esso A.G.....	Ingolstadt	100.0	3.35
100.00% Exxon Corp.			
Esso A.G.....	Karlsruhe	180.0	6.03
100.00% Exxon Corp.			
Gelsenberg A.G.....	Gelsenkirchen	144.0	4.82
100.00% Veba A.G.			
Gewerkschaft Erdol Raff. Deurag-Neurag.....	Misburg	54.0	1.81
50.00% Exxon Corp.			
50.00% Royal Dutch/Shell			
Mobil Oil A.G.....	Bremen	30.0	1.00
100.00% Mobil Oil Corp.			
Mobil Oil A.G.....	Woerth	75.0	2.51
100.00% Mobil Oil Corp.			
Oberrheinische Mineralolwerke.....	Karlsruhe	128.0	4.29
10.00% Continental Oil Co.			
45.00% Texaco Inc.			
45.00% Veba A.G.			
Occidental OEL.....	Brunsbüttel	7.5	0.25
100.00% Occidental Petroleum Corp.			
Occidental OEL.....	Essen	20.0	0.67
100.00% Occidental Petroleum Corp.			
Oelwerke Julius Schindler.....	Hamburg	8.0	0.27
100.00% British Petroleum Co.			
Saarland Raffinerie.....	Klarenthal	55.2	1.85
25.00% Cie. Francaise Des Petroles			
25.00% French Govt.			
50.00% West German Govt.			
Union Rheinische Braunkohlen.....	Wesseling	125.0	4.19
100.00% Union Rheinische Braunkohlen			
Veba-Chemie A.G.....	Gelsenkirchen	215.7	7.22
100.00% Veba A.G.			
Wintershall A.G.....	Lingen	95.0	3.18
100.00% Wintershall A.G.			
Wintershall A.G.....	Salzbergen	5.0	0.17
100.00% Wintershall A.G.			



Table 3

## Free World: Crude Oil Refineries and Ownership, by Area (Continued)

Refinery Name and Ownership	Location	Crude Capacity (Thousand Barrels Per Day)	Percent of Total
<b>North America</b> .....		17,867.2	....
United States.....		14,995.3	100.00
Alabama.....		38.3	0.26
Hunt Oil Co.....	Tuscaloosa	18.0	0.12
100.00% Hunt Oil Co.			
Marion Corp.....	Theodore	17.3	0.12
100.00% Marion Corp.			
Warrior Asphalt Corp.....	Tuscaloosa	3.0	0.02
100.00% Warrior Asphalt Corp.			
Alaska.....		66.1	0.44
Atlantic Richfield Co.....	North Slope	4.8	0.03
100.00% Atlantic Richfield Co.			
British Petroleum Co.....	North Slope	1.3	0.01
100.00% British Petroleum Co.			
Standard Oil Co. of California.....	Kenai	22.0	0.15
100.00% Standard Oil Co. of California			
Tesoro-Alaskan Petroleum Corp.....	Kenai	38.0	0.25
100.00% Tesoro Petroleum Corp.			
Arizona.....		4.0	0.03
Arizona Fuels Corp.....	Fredonia	4.0	0.03
100.00% Arizona Fuels Corp.			
Arkansas.....		60.9	0.41
Berry Petroleum Co.....	Stephens	3.4	0.02
100.00% Commonwealth United Corp			
Cross Oil and Refining Co.....	Smackover	6.0	0.04
100.00% Henry H. Cross Co.			
Lion Oil Co.....	El Dorado	47.0	0.32
100.00% Monsanto Co.			
McMillian Ring-Free Oil Co.....	Norphlet	4.5	0.03
100.00% McMillian Ring-Free Oil Co.			
California.....		1,911.9	12.75
Atlantic Richfield Co.....	Carson	185.0	1.23
100.00% Atlantic Richfield Co.			
Beacon Oil Co.....	Hanford	12.0	0.08
100.00% Beacon Oil Co.			
Champlin Petroleum Co.....	Wilmington	30.6	0.20
100.00% Union Pacific Corp.			
Douglas Oil Co. of California.....	Paramount	46.0	0.30
100.00% Continental Oil Co.			
Douglas Oil Co. of California.....	Santa Maria	9.5	0.06
100.00% Continental Oil Co.			
Edgington Oil Co.....	Long Beach	29.5	0.20
100.00% Edgington Oil Co.			
Edgington Oxnard Asphalt Co.....	Oxnard	2.5	0.02
100.00% Edgington Oxnard Asphalt Co.			
Exxon Corp.....	Benicia	88.0	0.59
100.00% Exxon Corp.			
Fletcher Oil and Refining Co.....	Carson	19.2	0.13
100.00% Flecher Oil and Refining Co.			
Golden Bear Oil Co.....	Oildale	11.0	0.07
100.00% Witeco Chemical Corp.			
Golden Eagle Refining Co.....	Carson	13.0	0.09
100.00% Ultramar Co., Ltd.			
Gulf Oil Corp.....	Hercules	27.0	0.18
100.00% Gulf Oil Corp.			

Table 3

## Free World: Crude Oil Refineries and Ownership, by Area (Continued)

Refinery Name and Ownership	Location	Crude Capacity (Thousand Barrels Per Day)	Percent of Total
<b>North America (Continued)</b>			
United States (Continued)			
California (Continued)			
Gulf Oil Corp.....	Santa Fe Springs	51.5	0.34
100.00% Gulf Oil Corp.			
Kern County Refinery Inc.....	Bakersfield	15.9	0.11
40.00% Charter Oil Co.			
60.00% Kern County Refinery Inc.			
Lunday-Thagard Oil Co.....	South Gate	5.4	0.04
100.00% Lunday-Thagard Oil Co.			
McMillan Ring-Free Oil Co.....	Signal Hill	12.2	0.08
100.00% McMillan Ring-Free Oil Co.			
Mobil Oil Corp.....	Torrance	123.5	0.82
100.00% Mobil Oil Corp.			
Mohawk Petroleum Corp.....	Bakersfield	22.1	0.15
100.00% Reserve Oil and Gas Co.			
Newhall Refining Co. Inc.....	Newhall	11.5	0.08
100.00% Pauley Petroleum Co.			
Phillips Petroleum Co.....	Avon	110.0	0.73
100.00% Phillips Petroleum Co.			
Powerine Oil Co.....	Santa Fe Springs	46.0	0.31
100.00% Powerine Oil Co.			
Road Oil Sales Inc.....	Bakersfield	1.5	0.01
100.00% Road Oil Sales Inc.			
Sabre Refining Inc.....	Bakersfield	3.5	0.02
100.00% Sabre Refining Inc.			
San Joaquin Refining Co.....	Oildale	29.3	0.20
100.00% San Joaquin Refining Co.			
Shell Oil Co.....	Martinez	100.0	0.67
69.00% Royal Dutch/Shell			
31.00% Shell Oil Co.			
Shell Oil Co.....	Wilmington	96.0	0.64
69.00% Royal Dutch/Shell			
31.00% Shell Oil Co.			
Standard Oil Co. of California.....	Bakersfield	26.0	0.17
100.00% Standard Oil Co. of California			
Standard Oil Co. of California.....	El Segundo	230.0	1.54
100.00% Standard Oil Co. of California			
Standard Oil Co. of California.....	Richmond	190.0	1.27
100.00% Standard Oil Co. of California			
Sunland Refining Corp.....	Bakersfield	15.0	0.10
100.00% Sunland Refining Corp.			
Tenneco Oil Co.....	Bakersfield	1.2	0.01
100.00% Tenneco Inc.			
Texaco Inc.....	Wilmington	75.0	0.50
100.00% Texaco Inc.			
Tosco Petro Corp.....	Bakersfield	40.0	0.26
100.00% The Oil Shale Co.			
Union Oil Co. of California.....	Los Angeles	108.0	0.72
100.00% Union Oil Co. of California			
Union Oil Co. of California.....	San Francisco	110.0	0.73
100.00% Union Oil Co. of California			
West Coast Oil Co.....	Bakersfield	15.0	0.10
100.00% West Coast Oil Co.			
Colorado.....		60.0	0.40
Continental Oil Co.....	Commeree City	30.0	0.20
100.00% Continental Oil Co.			

Table 3

## Free World: Crude Oil Refineries and Ownership, by Area (Continued)

Refinery Name and Ownership	Location	Crude Capacity (Thousand Barrels Per Day)	Percent of Total
<b>North America (Continued)</b>			
United States (Continued)			
Colorado (Continued)			
Gary Western Co.....	Grand Junction	9.5	0.06
100.00% Gary Western Co.			
The Refinery Corp.....	Commerce City	20.5	0.14
100.00% The Refinery Corp.			
Delaware.....			
Getty Oil Co.....	Delaware City	140.0	0.93
100.00% Getty Oil Co.		140.0	0.93
Florida.....			
Seminole Asphalt Refining Inc.....	St. Marks	5.7	0.04
100.00% Seminole Asphalt Refining Inc.		5.7	0.04
Georgia.....			
Amoco Oil Co.....	Savannah	18.0	0.12
100.00% Standard Oil Co. of Indiana		13.0	0.09
Young Refining Corp.....	Douglasville	5.0	0.03
100.00% Young Refining Corp.			
Hawaii.....			
Hawaiian Independent Refinery Inc.....	Barbers Point	85.0	0.56
52.00% Pacific Resources Inc.		45.0	0.30
48.00% Hawaiian Independent Refinery Inc.			
Standard Oil Co. of California.....	Barbers Point	40.0	0.26
100.00% Standard Oil Co. of California			
Illinois.....			
Amoco Oil Co.....	Wood River	1,173.5	7.83
100.00% Standard Oil Co. of Indiana		105.0	0.70
Clark Oil and Refining Corp.....	Blue Island	69.0	0.46
100.00% Clark Oil and Refining Corp.			
Clark Oil and Refining Corp.....	Hartford	38.0	0.25
100.00% Clark Oil and Refining Corp.			
Marathon Oil Co.....	Robinson	195.0	1.30
100.00% Marathon Oil Co.			
Mobil Oil Corp.....	Joliet	175.0	1.17
100.00% Mobil Oil Corp.			
Shell Oil Co.....	Wood River	283.0	1.89
69.00% Royal Dutch/Shell			
31.00% Shell Oil Co.			
Texaco Inc.....	Lawrenceville	84.0	0.56
100.00% Texaco Inc.			
Texaco Inc.....	Lockport	72.0	0.48
100.00% Texaco Inc.			
Union Oil Co. of California.....	Lemont	150.0	1.00
100.00% Union Oil Co. of California			
Wireback Oil Co.....	Plymouth	1.5	0.01
100.00% Wireback Oil Co.			
Yetter Oil Co.....	Colmar	1.0	0.01
100.00% Yetter Oil Co.			
Indiana.....			
Amoco Oil Co.....	Whiting	564.8	3.77
100.00% Standard Oil Co. of Indiana		360.0	2.40
Atlantic Richfield Co.....	East Chicago	126.0	0.84
100.00% Atlantic Richfield Co.			
Crystal Princeton Refining Co.....	Princeton	4.3	0.02
100.00% Crystal Princeton Refining Co.			
Gladieux Refinery Inc.....	Fort Wayne	8.5	0.06
100.00% Gladieux Refinery Inc.			

Table 3

Free World: Crude Oil Refineries and Ownership, by Area (Continued)

Refinery Name and Ownership	Location	Crude Capacity (Thousand Barrels Per Day)	Percent of Total
<b>North America (Continued)</b>			
United States (Continued)			
Indiana (Continued)			
Indiana Farm Bureau Coop. Assoc. ....	Mt. Vernon	18.0	0.12
100.00% Indiana Farm Bureau Coop. Assoc.			
Laketon Asphalt Refining Inc. ....	Laketon	8.5	0.06
100.00% Laketon Asphalt Refining Inc.			
Pioneer Division. ....	Hammond	10.0	0.07
100.00% Witco Chemical Co.			
Rock Island Refining Corp. ....	Indianapolis	29.5	0.20
100.00% Rock Island Refining Corp.			
Kansas. ....		447.2	2.98
American Petrofina Inc. ....	El Dorado	25.0	0.17
70.00% Petrofina S.A.			
30.00% American Petrofina Inc.			
Apeo Oil Corp. ....	Arkansas City	46.2	0.31
100.00% Apeo Oil Corp.			
C.R.A. Inc. ....	Coffeyville	48.0	0.32
100.00% Cooperative Refinery Assoc.			
C.R.A. Inc. ....	Phillipsburg	20.5	0.13
100.00% Cooperative Refinery Assoc.			
Derby Refining Co. ....	Wichita	26.5	0.18
100.00% Colorado Oil and Gas Corp.			
Mid-America Refinery Co. ....	Chanute	3.1	0.02
100.00% Mid-America Refinery Co.			
Mobil Oil Corp. ....	Augusta	50.0	0.33
100.00% Mobil Oil Corp.			
National Cooperative Refinery Assoc. ....	McPherson	54.2	0.36
100.00% National Cooperative Refinery Assoc.			
North American Petroleum Corp. ....	Shallow Water	10.0	0.07
100.00% North American Petroleum Corp.			
Phillips Petroleum Co. ....	Kansas City	85.0	0.57
100.00% Phillips Petroleum Co.			
Skelly Oil Co. ....	El Dorado	78.7	0.52
72.5% Getty Oil Co.			
27.5% Skelly Oil Co.			
Kentucky. ....		164.0	1.09
Ashland Petroleum Co. ....	Catlettsburg	135.8	0.90
100.00% Ashland Oil Inc.			
Louisville Refining. ....	Louisville	25.2	0.17
100.00% Ashland Oil Inc.			
Somerset Refinery Inc. ....	Somerset	3.0	0.02
100.00% Somerset Refinery Inc.			
Louisiana. ....		1,745.0	11.64
Atlas Processing Co. ....	Shreve Port	45.0	0.30
100.00% Pennzoil United Inc.			
Bayou State Oil Corp. ....	Hosston	3.5	0.02
100.00% Bayou State Oil Corp.			
Calumet Refining Co. ....	Princeton	2.4	0.02
100.00% Calumet Industries Inc.			
Canal Refining Co. ....	Church Point	3.5	0.02
100.00% Canal Refining Co.			
Cities Service Oil Co. ....	Lake Charles	268.0	1.79
100.00% Cities Service Co.			
Claiborne Gasoline Co. ....	Lisbon	6.8	0.05
100.00% Claiborne Gasoline Co.			
Continental Oil Co. ....	Lake Charles	83.0	0.55
100.00% Continental Oil Co.			

Table 3

## Free World: Crude Oil Refineries and Ownership, by Area (Continued)

Refinery Name and Ownership	Location	Crude Capacity (Thousand Barrels Per Day)	Percent of Total
<b>North America (Continued)</b>			
United States (Continued)			
Louisiana (Continued)			
Evangeline Refining Co. Inc.....	Jennings	4.0	0.03
100.00% Evangeline Refining Co. Inc.			
Exxon Co. ....	Baton Rouge	455.0	3.04
100.00% Exxon Corp.			
Good Hope Refineries Inc. ....	Good Hope	29.5	0.20
100.00% Gastown Inc.			
Gulf Oil Co. ....	Alliance	180.4	1.20
100.00% Gulf Oil Corp.			
Gulf Oil Co. ....	Venice	28.7	0.19
100.00% Gulf Oil Corp.			
Kerr-McGee Corp. ....	Cotton Valley	10.7	0.07
100.00% Kerr-McGee Corp.			
La Jet Inc. ....	St. James	11.0	0.07
100.00% La Jet Inc.			
Murphy Oil Corp. ....	Meraux	92.5	0.62
100.00% Murphy Oil Corp.			
Shell Oil Co. ....	Norco	240.0	1.60
69.00% Royal Dutch/Shell			
31.00% Shell Oil Co.			
Tenneco Oil Co. ....	Chalmette	105.0	0.70
100.00% Tenneco Inc.			
Texaco Inc. ....	Convent	140.0	0.93
100.00% Texaco Inc.			
Toro Petroleum Corp. ....	Port Allen	36.0	0.24
100.00% Toro Petroleum Corp.			
Maryland .....		26.5	0.18
Amoco Oil Co. ....	Baltimore	13.0	0.09
100.00% Standard Oil Co. of Indiana			
Chevron Asphalt Co. ....	Baltimore	13.5	0.09
100.00% Standard Oil Co. of California			
Michigan .....		160.2	1.07
Bay Refining Co. ....	Bay City	32.0	0.22
100.00% Dow Chemical Co.			
Crystal Refining Co. ....	Carson City	6.2	0.04
100.00% Crystal Refining Co.			
Lakeside Refining Co. ....	Kalamazoo	5.3	0.04
100.00% Lakeside Refining Co.			
Marathon Oil Co. ....	Detroit	65.0	0.43
100.00% Marathon Oil Co.			
Osceola Refining Co. ....	West Branch	9.5	0.06
100.00% United Refining Co.			
Total Leonard Inc. ....	Alma	42.2	0.28
100.00% Cie. Francaise Des Petroles			
Minnesota .....		199.3	1.33
Continental Oil Co. ....	Wrenshall	23.5	0.16
100.00% Continental Oil Co.			
Koch Refining Co. ....	Pine Bend	109.8	0.73
100.00% Koch Industries Inc.			
Northwestern Refining Co. ....	St. Paul Park	66.0	0.44
100.00% Ashland Oil Inc.			
Mississippi .....		329.5	2.20
Amerada Hess Corp. ....	Purvis	28.5	0.19
100.00% Amerada Hess Corp.			

Table 3

## Free World: Crude Oil Refineries and Ownership, by Area (Continued)

Refinery Name and Ownership	Location	Crude Capacity (Thousand Barrels Per Day)	Percent of Total
<b>North America (Continued)</b>			
United States (Continued)			
Mississippi (Continued)			
Southland Oil Co.....	Lumberton	5.8	0.04
100.00% Vermont Gas Systems Inc.			
Southland Oil Co.....	Sandersville	11.0	0.07
100.00% Vermont Gas Systems Inc.			
Southland Oil Co.....	Yazoo City	4.2	0.03
100.00% Vermont Gas Systems Inc.			
Standard Oil Co. of Kentucky.....	Pascagoula	280.0	1.87
100.00% Standard Oil Co. of California			
Missouri.....		107.0	0.71
Amoco Oil Co.....	Sugar Creek	107.0	0.71
100.00% Standard Oil Co. of Indiana			
Montana.....		157.3	1.05
Big West Oil Co.....	Kevin	5.1	0.03
100.00% Big West Oil Co.			
Cenex.....	Laurel	41.2	0.28
100.00% Cenex			
Continental Oil Co.....	Billings	52.5	0.35
100.00% Continental Oil Co.			
Exxon Co.....	Billings	45.0	0.30
100.00% Exxon Corp.			
Phillips Petroleum Co.....	Great Falls	6.0	0.04
100.00% Phillips Petroleum Co.			
Tesoro Petroleum Corp.....	Wolf Point	2.5	0.02
100.00% Tesoro Petroleum Corp.			
Westeo Refining Co.....	Cut Bank	5.0	0.03
100.00% Warrior Oil Co.			
Nebraska.....		5.0	0.03
CRA Inc.....	Scottsbluff	5.0	0.03
100.00% Cooperative Refinery Assoc.			
New Jersey.....		549.0	3.66
Chevron Oil Co.....	Perth Amboy	88.0	0.59
100.00% Standard Oil Co. of California			
Exxon Co.....	Linden	275.0	1.83
100.00% Exxon Corp.			
Mobil Oil Corp.....	Paulsboro	98.0	0.65
100.00% Mobil Oil Corp.			
Texaco Inc.....	Westville	88.0	0.59
100.00% Texaco Inc.			
New Mexico.....		103.1	0.69
Caribou Four Corners Inc.....	Kirtland	2.0	0.01
100.00% Caribou Four Corners Inc.			
Famariss Oil and Refining Co.....	Lovington	37.0	0.25
100.00% Famariss Oil and Refining Co.			
Famariss Oil and Refining Co.....	Monument	5.0	0.03
100.00% Famariss Oil and Refining Co.			
Navajo Refining Co.....	Artesia	30.0	0.20
100.00% Navajo Refining Co.			
Plateau Inc.....	Bloomfield	7.5	0.05
100.00% Plateau Inc.			
Shell Oil Co.....	Ciniza	20.0	0.14
69.00% Royal Dutch/Shell			
31.00% Shell Oil Co.			
Thriftway Co.....	Bloomfield	1.6	0.01
100.00% Thriftway Inc.			

Table 3

## Free World: Crude Oil Refineries and Ownership, by Area (Continued)

Refinery Name and Ownership	Location	Crude Capacity (Thousand Barrels Per Day)	Percent of Total
<b>North America (Continued)</b>			
United States (Continued)			
New York.....		111.4	0.74
Ashland Petroleum Co.....	Tonawanda	68.4	0.45
100.00% Ashland Oil Inc.			
Mobil Oil Corp.....	Buffalo	43.0	0.29
100.00% Mobil Oil Corp.			
North Dakota.....		59.0	0.39
Amoco Oil Co.....	Mandan	49.0	0.33
100.00% Standard Oil Co. of Indiana			
Northland Oil and Refining Co.....	Dickinson	5.0	0.03
100.00% Northland Oil and Refining Co.			
Westland Oil Co.....	Williston	5.0	0.03
100.00% Westland Oil Co.			
Ohio.....		589.8	3.93
Ashland Petroleum Co.....	Canton	64.0	0.43
100.00% Ashland Oil Inc.			
Ashland Petroleum Co.....	Findlay	20.4	0.14
100.00% Ashland Oil Inc.			
Gulf Oil Co.....	Cleves	42.1	0.28
100.00% Gulf Oil Corp.			
Gulf Oil Co.....	Toledo	50.3	0.33
100.00% Gulf Oil Corp.			
Standard Oil Co. of Ohio.....	Lima	168.0	1.12
25.00% British Petroleum Co.			
75.00% Standard Oil Co. of Ohio			
Standard Oil Co. of Ohio.....	Toledo	120.0	0.80
25.00% British Petroleum Co.			
75.00% Standard Oil Co. of Ohio			
Sun Oil Co.....	Toledo	125.0	0.83
100.00% Sun Oil Co.			
Oklahoma.....		516.8	3.45
Allied Materials Corp.....	Stroud	5.5	0.04
100.00% Allied Materials Corp.			
Apeco Oil Corp.....	Cyril	12.5	0.08
100.00% Apeco Oil Corp.			
Champlin Petroleum Co.....	Enid	53.8	0.36
100.00% Union Pacific Corp.			
Continental Oil Corp.....	Ponca City	128.5	0.86
100.00% Continental Oil Co.			
Kerr-McGee Corp.....	Wynnewood	47.0	0.31
100.00% Kerr-McGee Corp.			
Midlands Cooperatives Inc.....	Cushing	19.0	0.13
100.00% Midlands Cooperatives Inc.			
OKC Refining Inc.....	Okmulgee	25.0	0.17
100.00% Oklahoma Cement Co.			
Sun Oil Co.....	Duncan	48.5	0.32
100.00% Sun Oil Co.			
Sun Oil Co.....	Tulsa	88.5	0.59
100.00% Sun Oil Co.			
Texaco Inc.....	West Tulsa	50.0	0.33
100.00% Texaco Inc.			
Tonkawa Refining Co.....	Arnett	6.0	0.04
100.00% Tonkawa Refining Co.			
Vickers Petroleum Corp.....	Ardmore	32.5	0.22
100.00% Vickers Petroleum Corp.			

Table 3

## Free World: Crude Oil Refineries and Ownership, by Area (Continued)

Refinery Name and Ownership	Location	Crude Capacity (Thousand Barrels Per Day)	Percent of Total
<b>North America (Continued)</b>			
<b>United States (Continued)</b>			
Oregon.....		14.0	0.09
Standard Oil Co. of California.....	Portland	14.0	0.09
100.00% Standard Oil Co. of California			
Pennsylvania.....		757.0	5.05
Atlantic Richfield Co.....	Philadelphia	185.0	1.24
100.00% Atlantic Richfield Co.			
BP Oil Corp.....	Marcus Hook	143.0	0.95
25.00% British Petroleum Co.			
75.00% Standard Oil Co. of Ohio			
Gulf Oil Co.....	Philadelphia	174.3	1.16
100.00% Gulf Oil Corp.			
Kendall Amalie Division.....	Bradford	9.0	0.06
100.00% Witco Chemical Co.			
Pennzoil Co.....	Rouseville	10.0	0.07
100.00% Pennzoil United Inc.			
Quaker State Oil Refining Corp.....	Emlenton	3.3	0.02
100.00% Quaker State Oil Refining Corp.			
Quaker State Oil Refining Corp.....	Farmers Valley	6.5	0.04
100.00% Quaker State Oil Refining Corp.			
Sun Oil Co.....	Marcus Hook	165.0	1.10
100.00% Sun Oil Co.			
United Refining Co.....	Warren	52.0	0.35
100.00% United Refining Co.			
Valvoline Oil Co.....	Freedom	6.8	0.05
100.00% Ashland Oil Inc.			
Wolf's Head Oil Refining.....	Reno	2.1	0.01
100.00% Pennzoil United Inc.			
Rhode Island.....		7.5	0.05
Mobil Oil Corp.....	East Providence	7.5	0.05
100.00% Mobil Oil Corp.			
Tennessee.....		43.9	0.29
Delta Refining Co.....	Memphis	43.9	0.29
100.00% Earth Resources Inc.			
Texas.....		3,962.7	26.43
Adobe Refining Co.....	La Blanca	5.0	0.03
100.00% Crystal Oil Co.			
American Petrofina Inc.....	Mt. Pleasant	26.0	0.17
30.00% American Petrofina Inc.			
70.00% Petrofina S.A.			
American Petrofina Inc.....	Port Arthur	84.0	0.56
30.00% American Petrofina Inc.			
70.00% Petrofina S.A.			
Amoco Oil Co.....	Texas City	333.0	2.22
100.00% Standard Oil Co. of Indiana			
Atlantic Richfield Co.....	Houston	213.0	1.42
100.00% Atlantic Richfield Co.			
Champlin Petroleum Co.....	Corpus Christi	67.7	0.45
100.00% Union Pacific Corp.			
Charter International Oil Co.....	Houston	70.0	0.47
100.00% Charter Oil Co.			
Chevron Oil Co.....	El Paso	71.0	0.47
100.00% Standard Oil Co. of California			
Coastal States Petrochemical Co.....	Corpus Christi	170.0	1.13
100.00% Coastal States Petrochemical Co.			



Table 3

## Free World: Crude Oil Refineries and Ownership, by Area (Continued)

Refinery Name and Ownership	Location	Crude Capacity (Thousand Barrels Per Day)	Percent of Total
<b>North America (Continued)</b>			
United States (Continued)			
Texas (Continued)			
Cosden Oil and Chemical Co.....	Big Spring	65.0	0.43
30.00% American Petrofina			
70.00% Petrofina S.A.			
Crown Central Petroleum Corp.....	Houston	100.0	0.67
49.00% American Trading and Prod. Corp.			
51.00% Crown Central Petroleum Corp.			
Diamond Shamrock Oil and Gas Co.....	Sunray	48.3	0.32
100.00% Diamond Shamrock Corp.			
Dorchester Gas Producing Co.....	White Deer	1.0	0.01
100.00% Dorchester Gas Prod. Co.			
Eddy Refining Co.....	Houston	3.3	0.02
100.00% Eddy Refining Co.			
Exxon Co.....	Baytown	400.0	2.67
100.00% Exxon Corp.			
Flint Chemical Co.....	San Antonio	1.2	0.01
100.00% Flint Chemical Co.			
Gulf Oil Co.....	Port Arthur	312.0	2.08
100.00% Gulf Oil Corp.			
Gulf States Oil and Refining Co.....	Quitman	4.4	0.03
100.00% Gulf States Oil and Refining Co.			
Howell Hydrocarbons Inc.....	San Antonio	3.6	0.03
100.00% Howell Hydrocarbons Inc.			
J and W Refining Inc.....	Tucker	9.7	0.07
100.00% J and W Refining Inc.			
La Gloria Oil and Gas Co.....	Tyler	28.5	0.19
100.00% Texas Eastern Transmission Corp.			
Longview Refining Co.....	Longview	7.5	0.05
100.00% Crystal Oil Co.			
Marathon Oil Co.....	Texas City	64.0	0.43
100.00% Marathon Oil Co.			
Mid-Tex Refinery.....	Hearne	2.6	0.02
100.00% Mid-Tex Refinery			
Mobil Oil Corp.....	Beaumont	325.0	2.17
100.00% Mobil Oil Corp.			
Phillips Petroleum Co.....	Borger	99.0	0.66
100.00% Phillips Petroleum Co.			
Phillips Petroleum Co.....	Sweeny	85.0	0.57
100.00% Phillips Petroleum Co.			
Pride Refining Inc.....	Abilene	36.5	0.24
100.00% Pride Refining Inc.			
Quintana-Howell Joint Venture.....	Corpus Christi	44.4	0.30
100.00% Quintana-Howell Joint Venture			
Shell Oil Co.....	Deer Park	294.0	1.96
69.00% Royal Dutch/Shell			
31.00% Shell Oil Co.			
Shell Oil Co.....	Odessa	32.0	0.21
69.00% Royal Dutch/Shell			
31.00% Shell Oil Co.			
South Hampton Co.....	Silsbee	30.1	0.20
100.00% South Hampton Co.			
Southwestern Refining Co.....	Corpus Christi	114.0	0.76
100.00% Southwestern Refining Co.			
Suntide Refining Co.....	Corpus Christi	57.0	0.38
100.00% Sun Oil Co.			

Table 3

## Free World: Crude Oil Refineries and Ownership, by Area (Continued)

Refinery Name and Ownership	Location	Crude Capacity (Thousand Barrels Per Day)	Percent of Total
<b>North America (Continued)</b>			
United States (Continued)			
Texas (Continued)			
Tesoro Petroleum Corp. ....	Carrizo Springs	25.0	0.17
100.00% Tesoro Petroleum Corp.			
Texaco Inc. ....	Amarillo	20.0	0.13
100.00% Texaco Inc.			
Texaco Inc. ....	El Paso	17.0	0.11
100.00% Texaco Inc.			
Texaco Inc. ....	Port Arthur	406.0	2.71
100.00% Texaco Inc.			
Texaco Inc. ....	Port Neches	47.0	0.31
100.00% Texaco Inc.			
Texas Asphalt and Refining Co. ....	Euless	6.0	0.04
100.00% Texas Asphalt and Refining Co.			
Texas City Refining Inc. ....	Texas City	76.5	0.51
100.00% Texas City Refining Inc.			
Texas Fuel and Asphalt Co. ....	La Coste	1.0	0.01
100.00% Texas Fuel and Asphalt Co.			
Union Oil Co. of California. ....	Nederland	127.0	0.85
100.00% Union Oil Co. of California			
Union Texas Petroleum. ....	Winnie	9.4	0.06
100.00% Allied Chemical Corp.			
Winston Refining Co. ....	Fort Worth	20.0	0.13
100.00% Winston Refining Co.			
Utah. ....			
Amoco Oil Co. ....	Salt Lake City	143.0	0.95
100.00% Standard Oil Co. of Indiana		39.0	0.26
Caribou Four Corners Inc. ....	Woods Cross	5.0	0.03
100.00% Caribou Four Corners Inc.			
Chevron Oil Co. ....	Salt Lake City	45.0	0.30
100.00% Standard Oil Co. of California			
Husky Oil Co. ....	North Salt Lake	23.0	0.15
100.00% Husky Oil Ltd.			
Major Oil Corp. ....	Roosevelt	8.0	0.05
100.00% Major Oil Corp.			
Phillips Petroleum Co. ....	Woods Cross	23.0	0.16
100.00% Phillips Petroleum Co.			
Virginia. ....			
Amoco Oil Co. ....	Yorktown	53.0	0.35
100.00% Standard Oil Co. of Indiana		53.0	0.35
Washington. ....			
Atlantic Richfield Co. ....	Cherry Point	364.0	2.43
100.00% Atlantic Richfield Co.		96.0	0.64
Mobil Oil Corp. ....	Ferndale	71.5	0.48
100.00% Mobil Oil Corp.			
Shell Oil Co. ....	Anacortes	91.0	0.61
69.00% Royal Dutch/Shell			
31.00% Shell Oil Co.			
Sound Refining Inc. ....	Tacoma	4.5	0.03
100.00% Kewanee Oil Co.			
Standard Oil Co. of California. ....	Richmond Beach	4.5	0.03
100.00% Standard Oil Co. of California			
Texaco Inc. ....	Anacortes	78.0	0.52
100.00% Texaco Inc.			
U.S. Oil and Refining Co. ....	Tacoma	18.5	0.12
100.00% U.S. Oil and Refining Co.			

Table 3

## Free World: Crude Oil Refineries and Ownership, by Area (Continued)

Refinery Name and Ownership	Location	Crude Capacity (Thousand Barrels Per Day)	Percent of Total
<b>North America (Continued)</b>			
United States (Continued)			
West Virginia.....		19.9	0.13
Elk Refining.....	Falling Rock	5.2	0.03
100.00% Pennzoil United Inc.			
Quaker State Oil Refining Corp.....	Newell	9.7	0.07
100.00% Quaker State Oil Refining Corp.			
Quaker State Oil Refining Corp.....	St. Mary's	5.0	0.03
100.00% Quaker State Oil Refining Corp.			
Wisconsin.....		45.0	0.30
Murphy Oil Corp.....	Superior	45.0	0.30
100.00% Murphy Oil Corp.			
Wyoming.....		187.0	1.25
Amoco Oil Co.....	Casper	43.0	0.29
100.00% Standard Oil Co. of Indiana			
C & H Refinery Inc.....	Lusk	0.5	....
100.00% C & H Refinery Inc.			
Husky Oil Co.....	Cheyenne	23.6	0.16
100.00% Husky Oil Ltd.			
Husky Oil Co.....	Cody	10.7	0.07
100.00% Husky Oil Ltd.			
Little America Refining Co.....	Casper	24.3	0.16
100.00% Little America Stations Inc.			
Mountaineer Refining Co. Inc.....	La Barge	0.3	....
100.00% Mountaineer Refining Co. Inc.			
Pasco Inc.....	Sinclair	48.6	0.33
100.00% Pasco Inc.			
Sage Creek Refining Co.....	Cowley	1.2	0.01
100.00% Sage Creek Refining Co.			
Southwestern Refining Co.....	La Barge	0.3	....
100.00% Southwestern Refining Co.			
Tesoro Petroleum Corp.....	Newcastle	10.5	0.07
100.00% Tesoro Petroleum Corp.			
Texaco Inc.....	Casper	21.0	0.14
100.00% Texaco Inc.			
V-1 Oil Co.....	Glenrock	3.0	0.02
100.00% V-1 Oil Co.			
Canada.....		2,111.9	100.00
BP Refinery Canada, Ltd.....	Oakville	71.0	3.36
34.00% BP Refinery Canada, Ltd.			
66.00% British Petroleum Co.			
BP Refinery Canada, Ltd.....	Montreal	71.0	3.36
34.00% BP Refinery Canada, Ltd.			
66.00% British Petroleum Co.			
Chevron Canada.....	Burnaby	22.0	1.04
100.00% Standard Oil Co. of California			
Consumers Co-operative Refining Inc.....	Regina	25.0	1.18
100.00% Consumers Co-operative Refining Inc.			
Golden Eagle Canada, Ltd.....	Holyrood	12.0	0.57
100.00% Ultramar Co., Ltd.			
Golden Eagle Canada, Ltd.....	St. Romuald	103.0	4.88
100.00% Ultramar Co., Ltd.			
Gulf Oil Canada, Ltd.....	Calgary	8.7	0.41
31.41% Gulf Oil Canada, Ltd.			
68.59% Gulf Oil Corp.			
Gulf Oil Canada, Ltd.....	Clarkson	62.4	2.95
31.41% Gulf Oil Canada, Ltd.			
68.59% Gulf Oil Corp.			

Table 3

## Free World: Crude Oil Refineries and Ownership, by Area (Continued)

Refinery Name and Ownership	Location	Crude Capacity (Thousand Barrels Per Day)	Percent of Total
<b>North America (Continued)</b>			
Canada (Continued)			
Gulf Oil Canada, Ltd. ....	Edmonton	74.6	3.53
31.41% Gulf Oil Canada, Ltd.			
68.59% Gulf Oil Corp.			
Gulf Oil Canada, Ltd. ....	Kamloops	7.7	0.36
31.41% Gulf Oil Canada, Ltd.			
68.59% Gulf Oil Corp.			
Gulf Oil Canada, Ltd. ....	Montreal	77.3	3.66
31.41% Gulf Oil Canada, Ltd.			
68.59% Gulf Oil Corp.			
Gulf Oil Canada, Ltd. ....	Moose Jaw	9.3	0.44
31.41% Gulf Oil Canada, Ltd.			
68.59% Gulf Oil Corp.			
Gulf Oil Canada, Ltd. ....	Port Moody	37.2	1.76
31.41% Gulf Oil Canada, Ltd.			
68.59% Gulf Oil Corp.			
Gulf Oil Canada, Ltd. ....	Point Tupper	81.0	3.84
31.41% Gulf Oil Canada, Ltd.			
68.59% Gulf Oil Corp.			
Husky Oil, Ltd. ....	Lloydminster	11.2	0.53
100.00% Husky Oil, Ltd.			
Imperial Oil, Ltd. ....	Dartmouth	82.8	3.92
70.00% Exxon Corp.			
30.00% Imperial Oil, Ltd.			
Imperial Oil, Ltd. ....	Edmonton	140.0	6.63
70.00% Exxon Corp.			
30.00% Imperial Oil, Ltd.			
Imperial Oil, Ltd. ....	Ioco	36.8	1.74
70.00% Exxon Corp.			
30.00% Imperial Oil, Ltd.			
Imperial Oil, Ltd. ....	Montreal	105.8	5.01
70.00% Exxon Corp.			
30.00% Imperial Oil, Ltd.			
Imperial Oil, Ltd. ....	Norman Wells	2.9	0.14
70.00% Exxon Corp.			
30.00% Imperial Oil, Ltd.			
Imperial Oil, Ltd. ....	Regina	32.2	1.52
70.00% Exxon Corp.			
30.00% Imperial Oil, Ltd.			
Imperial Oil, Ltd. ....	Sarnia	130.3	6.17
70.00% Exxon Corp.			
30.00% Imperial Oil, Ltd.			
Imperial Oil, Ltd. ....	Winnepeg	22.0	1.04
70.00% Exxon Corp.			
30.00% Imperial Oil, Ltd.			
Irving Refining, Ltd. ....	St. John	130.0	6.16
50.00% Irving Oil, Ltd.			
50.00% Standard Oil Co. of California			
Newfoundland Refining Co., Ltd. ....	Come by Chance	100.0	4.73
100.00% Shaheen Natural Resources Co.			
Pacific Petroleum, Ltd. ....	Taylor	11.0	0.52
52.00% Pacific Petroleum, Ltd.			
48.00% Phillips Petroleum Corp.			
Petrofina Canada, Ltd. ....	Montreal	93.0	4.40
34.00% Petrofina Canada, Ltd.			
66.00% Petrofina S.A.			

Table 3

## Free World: Crude Oil Refineries and Ownership, by Area (Continued)

Refinery Name and Ownership	Location	Crude Capacity (Thousand Barrels Per Day)	Percent of Total
<b>North America (Continued)</b>			
Canada (Continued)			
Regent Refining (Canada), Ltd. .... 100.00% Texaco Inc.	Port Credit	48.0	2.27
Shell Canada, Ltd. .... 87.00% Royal Dutch/Shell 13.00% Shell Canada, Ltd.	Bowden	5.0	0.24
Shell Canada, Ltd. .... 87.00% Royal Dutch/Shell 13.00% Shell Canada, Ltd.	Montreal	125.0	5.92
Shell Canada, Ltd. .... 87.00% Royal Dutch/Shell 13.00% Shell Canada, Ltd.	Oakville	44.0	2.08
Shell Canada, Ltd. .... 87.00% Royal Dutch/Shell 13.00% Shell Canada, Ltd.	Sarnia	80.0	3.79
Shell Canada, Ltd. .... 87.00% Royal Dutch/Shell 13.00% Shell Canada, Ltd.	Shellburn	22.0	1.04
Shell Canada, Ltd. .... 87.00% Royal Dutch/Shell 13.00% Shell Canada, Ltd.	St. Boniface	28.0	1.33
Sun Oil Co., Ltd. .... 100.00% Sun Oil Co.	Sarnia	80.0	3.79
Texaco Canada, Ltd. .... 32.00% Texaco Canada, Ltd. 68.00% Texaco Inc.	Edmonton	21.0	0.99
Texaco Canada, Ltd. .... 32.00% Texaco Canada, Ltd. 68.00% Texaco Inc.	Halifax	18.0	0.85
Texaco Canada, Ltd. .... 32.00% Texaco Canada, Ltd. 68.00% Texaco Inc.	Montreal	73.0	3.46
Union Oil Co. of Canada .... 87.00% Union Oil Co. of California 13.00% Union Oil Co. of Canada	Prince George	7.7	0.39
Mexico .....		760.0	....
Petroleos Mexicanos .... 100.00% Mexican Govt.	Azcapotzalco	100.0	....
Petroleos Mexicanos .... 100.00% Mexican Govt.	Cuidad Madero	169.0	....
Petroleos Mexicanos .... 100.00% Mexican Govt.	Minatitlan	233.5	....
Petroleos Mexicanos .... 100.00% Mexican Govt.	Poza Rica	27.0	....
Petroleos Mexicanos .... 100.00% Mexican Govt.	Reynosa	20.5	....
Petroleos Mexicanos .....	Salamanca	210.0	....
<b>South America and Caribbean</b> .....		<b>6,891.8</b>	<b>....</b>
Antigua .....		16.0	100.00
West Indies Oil Co., Ltd. .... 100.00% Antigua Govt.	....	16.0	100.00
Argentina .....		720.5	100.00
Astrasur .... 86.00% Argentina De Petroleo S.A. 14.00% Argentine Govt.	Comodoro Rivadavia	6.8	0.94

Table 3

## Free World: Crude Oil Refineries and Ownership, by Area (Continued)

Refinery Name and Ownership	Location	Crude Capacity (Thousand Barrels Per Day)	Percent of Total
<b>South America and Caribbean (Continued)</b>			
<b>Argentina (Continued)</b>			
Destileria Argentina De Petroleo.....	Lomas De Zamora	1.8	0.25
100.00% Destileria Argentina De Petroleo			
Esso SA Petrolera Argentina.....	Compana	91.9	12.76
100.00% Exxon Corp.			
Esso SA Petrolera Argentina.....	Galvan	17.0	2.36
100.00% Exxon Corp.			
Ragor SAIC.....	Quilmes	0.6	0.08
100.00% Ragor SAIC			
Refineria De Petroleo La Isaura.....	Bahia Blanca	12.6	1.75
100.00% Refineria De Petroleo La Isaura			
Shell Compania Argentina De Petroleo.....	Buenos Aires	115.0	15.96
100.00% Royal Dutch/Shell			
Yacimientos Petroliferos Fiscales.....	Campo Duran	28.3	3.93
100.00% Argentine Govt.			
Yacimientos Petroliferos Fiscales.....	Dock Sud	6.0	0.83
100.00% Argentine Govt.			
Yacimientos Petroliferos Fiscales.....	La Plata	289.0	40.11
100.00% Argentine Govt.			
Yacimientos Petroliferos Fiscales.....	Lujan De Cuyo	113.2	15.71
100.00% Argentine Govt.			
Yacimientos Petroliferos Fiscales.....	Plaza Huincul	5.0	0.69
100.00% Argentine Govt.			
Yacimientos Petroliferos Fiscales.....	San Lorenzo	33.3	4.63
100.00% Argentine Govt.			
Bahamas.....		500.0	100.00
Bahamas Oil Refining Co.....	Freeport	500.0	100.00
65.00% New England Petroleum Co.			
35.00% Standard Oil Co. of California			
Barbados.....		3.0	100.00
Mobil Oil Barbados, Ltd.....	Bridgetown	3.0	100.00
100.00% Mobil Oil Corp.			
Bolivia.....		25.5	100.00
Yacimientos Petroliferos Fiscales Bolivianos.....	Camiri	1.5	5.88
100.00% Bolivian Govt.			
Yacimientos Petroliferos Fiscales Bolivianos.....	Cochahamba	16.5	64.71
100.00% Bolivian Govt.			
Yacimientos Petroliferos Fiscales Bolivianos.....	Sanandita	0.5	1.96
100.00% Bolivian Govt.			
Yacimientos Petroliferos Fiscales Bolivianos.....	Santa Cruz	3.0	11.77
100.00% Bolivian Govt.			
Yacimientos Petroliferos Fiscales Bolivianos.....	Sucre	4.0	15.68
100.00% Bolivian Govt.			
Brazil.....		961.8	100.00
Petroleo Brasileiro S.A.....	Betim	60.5	6.29
100.00% Brazilian Govt.			
Petroleo Brasileiro S.A.....	Canoas	60.5	0.29
100.00% Brazilian Govt.			
Petroleo Brasileiro S.A.....	Capuava	33.0	3.43
100.00% Brazilian Govt.			
Petroleo Brasileiro S.A.....	Cubatao	175.0	18.20
100.00% Brazilian Govt.			
Petroleo Brasileiro S.A.....	Duque De Caxias	197.0	20.48
100.00% Brazilian Govt.			

Table 3

## Free World: Crude Oil Refineries and Ownership, by Area (Continued)

Refinery Name and Ownership	Location	Crude Capacity (Thousand Barrels Per Day)	Percent of Total
<b>South America and Caribbean (Continued)</b>			
Brazil (Continued)			
Petroleo Brasileiro S.A.....	Mataripe	77.0	8.00
100.00% Brazilian Govt.			
Petroleo Brasileiro S.A.....	Paulina	330.0	34.31
100.00% Brazilian Govt.			
Petroleo Brasileiro S.A.....	Paredao	10.0	1.04
100.00% Brazilian Govt.			
Refineria De Petroleos De Manguinhos.....	Rio De Janeiro	9.5	0.99
100.00% Refineria De Petroleos De Manguinhos			
Refineria De Petroleo Ipiranga.....	Rio Grande	9.3	0.97
100.00% Refineria De Petroleo Ipiranga			
Chile.....		123.5	100.00
Empresa Nacional Del Petroleo.....	Concepcion	72.0	58.30
100.00% Chilean Govt.			
Empresa Nacional Del Petroleo.....	Concon	50.0	40.49
100.00% Chilean Govt.			
Empresa Nacional Del Petroleo.....	Magallanes	1.5	1.21
100.00% Chilean Govt.			
Colombia.....		172.1	100.00
Colombian Petroleum Co.....	North Santander	3.0	1.74
50.00% Colombian Govt.			
50.00% Texaco Inc.			
Empresa Colombiana De Petroleos.....	Barrancabermeja	110.0	63.92
100.00% Colombian Govt.			
Empresa Colombiana De Petroleos.....	Cartagena	50.0	29.05
100.00% Colombian Govt.			
International Petroleum (Colombia), Ltd.....	La Dorada	5.6	3.25
100.00% Exxon Corp.			
Texas Petroleum Co.....	El Guamo	2.5	1.45
100.00% Texaco Inc.			
Texas Petroleum Co.....	Orita	1.0	0.59
100.00% Texaco Inc.			
Costa Rica.....		11.0	100.00
Refinadora Costarricense De Petroleo.....	Limon	11.0	100.00
100.00% Costa Rican Govt.			
Dominican Republic.....		45.5	100.00
Falconbridge Dominicana.....	Bonao	15.5	34.07
100.00% Falconbridge Dominicana			
Refineria Dominicana De Petroleo.....	Nigua	30.0	65.93
50.00% Dominican Govt.			
50.00% Royal Dutch/Shell			
Ecuador.....		44.4	100.00
Anglo-Ecuadorian Oilfields, Ltd.....	La Libertad	30.4	68.47
48.78% Anglo-Ecuadorian Oilfields, Ltd.			
51.22% Burmah Oil Co., Ltd.			
Corporacion Estatal Petrolera Ecuatoriana.....	La Libertad	5.0	11.26
100.00% Ecuadorian Govt.			
Petroleos Gulf Del Ecuador.....	La Libertad	8.0	18.02
100.00% Gulf Oil Corp.			
Texas Petroleum Co.....	Lago Agrio	1.0	2.25
100.00% Texaco Inc.			
El Salvador.....		14.0	100.00
Refineria Petrolera Acajutla S.A.....	Acajutla	14.0	100.00
65.00% Exxon Corp.			
35.00% Royal Dutch/Shell			

Table 3

## Free World: Crude Oil Refineries and Ownership, by Area (Continued)

Refinery Name and Ownership	Location	Crude Capacity (Thousand Barrels Per Day)	Percent of Total
<b>South America and Caribbean (Continued)</b>			
Guatemala.....		24.8	100.00
Refineria Petrolera De Guatemala-California Inc.....	Puerto Barrios	10.8	43.55
40.00% Royal Dutch/Shell			
60.00% Standard Oil Co. of California			
Texas Petroleum Co.....	Eseuintla	14.0	56.45
100.00% Texaco Inc.			
Honduras.....		14.0	100.00
Refineria Texaco De Honduras.....	Puerto Cortes	14.0	100.00
33.00% Refineria Texaco De Honduras			
67.00% Texaco Inc.			
Jamaica.....		33.0	100.00
Esso West Indies Ltd.....	Kingston	33.0	100.00
100.00% Exxon Corp.			
Martinique.....		10.4	100.00
Soc. Anon. Raffinerie Des Antilles.....	Fort De France	10.4	100.00
25.00% Cie. Francaise Des Petroles			
14.50% Exxon Corp.			
25.00% French Govt.			
24.00% Royal Dutch/Shell			
11.50% Texaco Inc.			
Netherlands Antilles.....		900.0	100.00
Lago Oil and Transport Co.....	Aruba	440.0	48.89
100.00% Exxon Corp.			
Shell Curacao NV.....	Curacao	460.0	51.11
100.00% Royal Dutch/Shell			
Nicaragua.....		13.2	100.00
Esso Standard Oil S.A., Ltd.....	Managua	13.2	100.00
100.00% Exxon Corp.			
Panama.....		100.0	100.00
Refineria Panama S.A.....	Las Minas Bay	100.0	100.00
100.00% Texaco Inc.			
Paraguay.....		10.0	100.00
Refineria Paraguaya S.A.....	Asuncion	10.0	100.00
100.00% Refineria Paraguaya S.A.			
Peru.....		129.6	100.00
Petroleos Del Peru.....	Conchan	8.5	6.56
100.00% Peruvian Govt.			
Petroleos Del Peru.....	Iquitos	1.4	1.08
100.00% Peruvian Govt.			
Petroleos Del Peru.....	La Pampilla	37.0	28.55
100.00% Peruvian Govt.			
Petroleos Del Peru.....	Pucallpa	2.7	2.08
100.00% Peruvian Govt.			
Petroleos Del Peru.....	Talara	80.0	61.73
100.00% Peruvian Govt.			
Puerto Rico.....		283.8	100.00
Caribbean Gulf Refining Corp.....	Bayamon	37.8	13.31
100.00% Gulf Oil Corp.			
Commonwealth Oil Refining Co.....	Penuelas	161.0	56.73
63.00% Commonwealth Oil Refining Co.			
37.00% Tesoro Petroleum Corp.			
Yabucoa Sun Oil Co.....	Yabucoa	85.0	29.96
100.00% Sun Oil Co.			



Table 3

## Free World: Crude Oil Refineries and Ownership, by Area (Continued)

Refinery Name and Ownership	Location	Crude Capacity (Thousand Barrels Per Day)	Percent of Total
<b>South America and Caribbean (Continued)</b>			
Trinidad and Tobago.....		461.0	100.00
Texaco Trinidad Inc.....	Brighton	6.0	1.30
100.00% Texaco Inc.			
Texaco Trinidad Inc.....	Pointe-a-Pierre	355.0	77.00
100.00% Texaco Inc.			
Trinidad and Tobago Oil Co., Ltd.....	Point Fortin	100.0	21.70
100.00% Trinidad/Tobago Govt.			
Uruguay.....		43.0	100.00
Ancap.....	La Teja	43.0	100.00
100.00% Uruguayan Govt.			
Venezuela.....		1,531.7	100.00
Chevron Oil Co. of Venezuela.....	Bajo Grande	61.5	4.02
100.00% Standard Oil Co. of California			
Cia. Shell De Venezuela.....	Cardon	348.0	22.72
100.00% Royal Dutch/Shell			
Cia. Shell De Venezuela.....	San Lorenzo	32.0	2.09
100.00% Royal Dutch/Shell			
Corporacion Venezolana Del Petroleo.....	Moron	30.0	1.96
100.00% Venezuelan Govt.			
Creole Petroleum Corp.....	Amuay	630.0	41.13
100.00% Exxon Corp.			
Creole Petroleum Corp.....	Caripito	110.0	7.18
100.00% Exxon Corp.			
Mobil Oil De Venezuela.....	El Palito	102.0	6.66
100.00% Mobil Oil Corp.			
Phillips Petroleum Co.....	San Roque	5.1	0.33
100.00% Phillips Petroleum Co.			
Sinclair Venezuelan Oil Co.....	Barinas	5.4	0.35
100.00% Atlantic Richfield Co.			
Sinclair Venezuelan Oil Co.....	El Chaure	40.0	2.61
100.00% Atlantic Richfield Co.			
Texas Petroleum Co.....	Tucupita	10.0	0.65
100.00% Texaco Inc.			
Venezuela Gulf Refining Co.....	Puerto La Cruz	157.7	10.30
66.67% Gulf Oil Corp.			
33.33% Texaco Inc.			
Virgin Islands.....		700.0	100.00
Hess Oil Virgin Islands Corp.....		700.0	100.00
100.00% Amerada Hess Corp.			

Table 4

## Free World: Company Crude Oil Refining Capacity, By Area

Location	Crude Capacity (Thousand Barrels Per Day)	Percent of Total
<b>Middle East</b> .....	<b>2,965.8</b>	<b>....</b>
Bahrain.....	250.0	100.00
Standard Oil Co. of California.....	125.0	50.00
Texaco Inc.....	125.0	50.00
Iran.....	789.0	100.00
Iranian Govt.....	789.0	100.00
Iraq.....	168.5	100.00
Iraqi Govt.....	168.5	100.00
Israel.....	201.0	100.00
Israeli Govt.....	128.6	64.00
Oil Refineries, Ltd.....	72.4	36.00
Jordan.....	21.2	100.00
Jordan Petroleum Refining Co.....	21.2	100.00
Kuwait.....	646.0	100.00
Getty Oil Co.....	50.0	7.74
Japanese Interests.....	24.0	3.72
Kuwaiti Govt.....	437.0	67.65
R. J. Reynolds Industries Inc.....	132.0	20.43
Saudi Arabian Govt.....	3.0	0.46
Lebanon.....	53.5	100.00
Lebanese Govt.....	36.0	67.29
Mobil Oil Corp.....	8.7	16.27
Standard Oil Co. of California.....	4.4	8.22
Texaco Inc.....	4.4	8.22
Qatar.....	6.8	100.00
Qatar Govt.....	6.8	100.00
Saudi Arabia.....	611.0	100.00
Exxon Corp.....	67.8	11.10
Mobil Oil Corp.....	22.6	3.70
Saudi Arabian Govt.....	385.0	63.00
Standard Oil Co. of California.....	67.8	11.10
Texaco Inc.....	67.8	11.10
South Yemen.....	169.1	100.00
British Petroleum Co.....	169.1	100.00
Syria.....	49.7	100.00
Syrian Govt.....	49.7	100.00
<b>Africa</b> .....	<b>1,289.0</b>	<b>....</b>
Algeria.....	115.3	100.00
Algerian Govt.....	115.3	100.00
Angola.....	35.7	100.00
Gulf Oil Corp.....	2.8	7.84
Petrofina S.A.....	19.4	54.34
Portuguese Govt.....	13.5	37.82
Egypt.....	180.0	100.00
Egyptian Govt.....	180.0	100.00
Ethiopia.....	14.4	100.00
Ethiopian Govt.....	14.4	100.00
Gabon.....	17.0	100.00
British Petroleum Co.....	0.5	3.08
Cameroon Govt.....	0.9	5.00
Central African Republic Govt.....	0.9	5.00
Chad Govt.....	0.9	5.00
Cie. Francaise Des Petroles.....	3.1	18.75
Congo Govt.....	0.9	5.00
French Govt.....	3.1	18.75

Table 4

## Free World: Company Crude Oil Refining Capacity, By Area (Continued)

Location	Crude Capacity (Thousand Barrels Per Day)	Percent of Total
<b>Africa (Continued)</b>		
Gabon (Continued)		
Gabon Govt.....	0.9	5.00
Italian Govt.....	0.4	2.50
Mobil Oil Corp.....	1.9	11.66
Petrofina S.A.....	0.6	3.27
Royal Dutch/Shell.....	1.9	11.39
Texaco Inc.....	1.0	5.60
Ghana.....	28.0	100.00
Ghanaian Govt.....	14.0	50.00
Italian Govt.....	14.0	50.00
Ivory Coast.....	43.0	100.00
British Petroleum Co.....	4.4	10.20
Cie. Francaise Des Petroles.....	5.6	13.00
Exxon Corp.....	0.4	1.00
French Govt.....	10.8	25.00
Ivory Coast Govt.....	4.3	10.00
Mobil Oil Corp.....	7.8	18.20
Royal Dutch/Shell.....	6.3	14.70
Texaco Inc.....	3.4	7.90
Kenya.....	80.0	100.00
British Petroleum Co.....	10.2	12.75
Exxon Corp.....	10.2	12.75
Kenya Govt.....	40.0	50.00
Royal Dutch/Shell.....	10.2	12.75
Standard Oil Co. of California.....	4.7	5.88
Texaco Inc.....	4.7	5.88
Liberia.....	11.0	100.00
Hydrocarbons Research.....	3.6	33.00
Sun Oil Co.....	7.4	67.00
Libya.....	68.0	100.00
Exxon Corp.....	8.0	11.77
Libyan Govt.....	60.0	88.23
Malagasy Republic.....	15.0	100.00
British Petroleum Co.....	1.1	7.50
Cie. Francaise Des Petroles.....	1.1	7.50
Exxon Corp.....	2.2	15.00
French Govt.....	5.2	35.00
Malagasy Republic Govt.....	2.3	15.00
Royal Dutch/Shell.....	1.1	7.50
Standard Oil Co. of California.....	1.0	6.25
Texaco Inc.....	1.0	6.25
Morocco.....	58.6	100.00
Cie. Francaise Des Petroles.....	0.6	1.03
French Govt.....	3.7	6.31
Moroccan Govt.....	54.3	92.66
Mozambique.....	17.0	100.00
Soc. National De Petroles S.A.R.L.....	17.0	100.00
Nigeria.....	60.0	100.00
British Petroleum Co.....	12.0	20.00
Nigerian Govt.....	36.0	60.00
Royal Dutch/Shell.....	12.0	20.00
Republic of South Africa.....	397.1	100.00
British Petroleum Co.....	92.5	23.29
Cie. Francaise Des Petroles.....	18.9	4.76

Table 4

## Free World: Company Crude Oil Refining Capacity, By Area (Continued)

Location	Crude Capacity (Thousand Barrels Per Day)	Percent of Total
<b>Africa (Continued)</b>		
Republic of South Africa (Continued)		
Iranian Govt.....	11.0	2.77
Mobil Oil Corp.....	100.0	25.19
Royal Dutch/Shell.....	92.5	23.29
Satmar Ltd.....	3.1	0.78
South African Govt.....	33.1	8.34
Standard Oil Co. of California.....	23.0	5.79
Texaco Inc.....	23.0	5.79
Rhodesia.....	20.0	100.00
British Petroleum Co.....	4.2	20.75
Cie. Francaise Des Petroles.....	1.0	5.00
Kuwait Govt.....	1.0	5.00
Mobil Oil Corp.....	3.6	17.75
R. J. Reynolds Industries.....	3.0	15.00
Royal Dutch/Shell.....	4.2	20.75
Standard Oil Co. of California.....	1.5	7.88
Texaco Inc.....	1.5	7.88
Senegal.....	15.0	100.00
Banque Nat. De Devel. Du Senegal.....	1.5	10.00
British Petroleum Co.....	1.8	11.80
Cie. Francaise Des Petroles.....	1.8	11.80
Exxon Corp.....	0.1	1.00
French Govt.....	3.5	24.00
Mobil Oil Corp.....	1.8	11.80
Royal Dutch/Shell.....	1.8	11.80
Soc. Africaine De Petroles.....	0.9	6.00
Texaco Inc.....	1.8	11.80
Sierra Leone.....	10.0	100.00
British Petroleum Co.....	0.7	6.90
Italian Govt.....	0.3	3.30
Mobile Oil Corp.....	1.1	11.30
Royal Dutch/Shell.....	1.8	17.70
Sierre Leone Govt.....	5.0	50.00
Texaco Inc.....	1.1	10.80
Sudan.....	22.0	100.00
British Petroleum Co.....	11.0	50.00
Royal Dutch/Shell.....	11.0	50.00
Tanzania.....	16.1	100.00
Italian Govt.....	8.0	50.00
Tanzanian Govt.....	8.1	50.00
Tunisia.....	25.0	100.00
Tunisian Govt.....	25.0	100.00
Zaire.....	16.2	100.00
Italian Govt.....	8.1	50.00
Zaire Govt.....	8.1	50.00
Zambia.....	24.6	100.00
Italian Govt.....	12.3	50.00
Zambian Govt.....	12.3	50.00
<b>Far East and Oceania.....</b>	<b>9,890.4</b>	<b>....</b>
Australia.....	722.1	100.00
Ampol Petroleum, Ltd.....	55.0	7.62
British Petroleum Co.....	160.0	22.16
Cie. Francaise Des Petroles.....	20.0	2.76
Exxon Corp.....	50.8	7.03

Table 4

## Free World: Company Crude Oil Refining Capacity, By Area (Continued)

Location	Crude Capacity (Thousand Barrels Per Day)	Percent of Total
<b>Far East and Oceania (Continued)</b>		
Australia (Continued)		
Mobil Oil Corp.....	94.3	13.06
Royal Dutch/Shell.....	147.0	20.36
Standard Oil Co. of California.....	68.5	9.49
Standard Oil Co. of Indiana.....	58.0	8.03
Texaco Inc.....	68.5	9.49
Bangladesh.....	30.5	100.00
Burmah Oil Co., Ltd.....	9.1	30.00
Eastern Refinery, Ltd.....	21.4	70.00
Burma.....	28.3	100.00
Burmese Govt.....	28.3	100.00
Cambodia.....	12.0	100.00
Cambodian Govt.....	7.8	65.00
French Govt.....	4.2	35.00
Guam.....	29.5	100.00
Guam Oil and Refining Co.....	29.5	100.00
India.....	555.1	100.00
Burmah Oil Co., Ltd.....	67.6	12.18
Cochin Refineries, Ltd.....	14.0	2.52
Exxon Corp.....	18.2	3.28
Indian Govt.....	335.8	60.49
Iranian Govt.....	7.3	1.32
Phillips Petroleum Co.....	17.4	3.13
Royal Dutch/Shell.....	55.5	10.00
Standard Oil Co. of California.....	16.0	2.88
Standard Oil Co. of Indiana.....	7.3	1.32
Texaco Inc.....	16.0	2.88
Indonesia.....	423.7	100.00
Indonesian Govt.....	423.7	100.00
Japan.....	5,660.4	100.00
Daikyo Oil.....	195.0	3.45
Exxon Corp.....	252.6	4.46
Fuji Kosan.....	77.6	1.37
Fuji Oil.....	210.0	3.71
General Bussan Kaisha.....	107.5	1.90
Getty Oil Co.....	207.5	3.67
Gulf Oil Corp.....	45.0	0.80
Idemitsu Kosan.....	688.3	12.16
Japan Line.....	35.3	0.62
Kansai Oil Co.....	93.5	1.65
Kashima Oil.....	180.0	3.18
Koa Oil Co.....	114.5	2.02
Kyodo Sekiyu K.K.....	33.3	0.59
Kyokuto Petroleum Industries.....	7.5	0.13
Kyushu Oil Co.....	170.0	3.00
Maruzen Oil Co.....	299.0	5.28
Mitsubishi Chemical.....	159.5	2.82
Mitsubishi Group.....	90.8	1.60
Mitsubishi Oil Co., Ltd.....	207.5	3.67
Mitsui and Co.....	109.7	1.94
Mobil Oil Corp.....	200.1	3.54
Nansei Sekiyu.....	20.0	0.35
Nichimo Sekiyu Seisei.....	30.0	0.53
Nihonkai Oil Co.....	60.0	1.06

Table 4

## Free World: Company Crude Oil Refining Capacity, By Area (Continued)

Location	Crude Capacity (Thousand Barrels Per Day)	Percent of Total
<b>Far East and Oceania (Continued)</b>		
Japan (Continued)		
Nippon Mining .....	249.4	4.41
Nippon Oil .....	311.0	5.49
Royal Dutch/Shell .....	273.0	4.82
Seibu Oil .....	62.7	1.11
Showa Oil Co., Ltd .....	173.5	3.07
Standard Oil Co. of California .....	200.3	3.54
Taiyo Oil Co., Ltd .....	69.0	1.22
Teiseki Topping Plant .....	4.4	0.08
Texaco Inc .....	200.2	3.54
Toa Kyoseki Co., Ltd .....	100.0	1.77
Toa Nenryo Kogyo .....	250.3	4.42
Toa Oil .....	90.0	1.59
Toho Oil Co., Ltd .....	13.4	0.23
Tohoku Oil Co .....	60.0	1.06
Toyo Petroleum Refining Co .....	9.0	0.15
Malaysia .....	126.0	100.00
Esso Malaya Berhad .....	12.2	9.68
Exxon Corp .....	22.8	18.10
Royal Dutch/Shell .....	83.3	66.11
Shell Refining Co., Ltd. (Malaya) .....	7.7	6.11
New Zealand .....	54.0	100.00
British Petroleum Co .....	12.7	23.57
Mobil Oil Corp .....	10.4	19.20
New Zealand Refining Co., Ltd .....	17.0	31.52
Royal Dutch/Shell .....	9.3	17.14
Standard Oil Co. of California .....	2.3	4.28
Texaco Inc .....	2.3	4.28
Pakistan .....	79.2	100.00
Attock Oil Co .....	11.6	14.65
Burmah Oil Co., Ltd .....	8.2	10.35
Exxon Corp .....	10.0	12.63
Pakistani Govt .....	12.6	15.91
Pakistan Refinery Ltd .....	22.0	27.77
Royal Dutch/Shell .....	8.2	10.35
Standard Oil Co. of California .....	3.3	4.17
Texaco Inc .....	3.3	4.17
Philippines .....	274.0	100.00
Mobil Oil Corp .....	46.4	16.93
Phillipines Govt .....	89.6	32.70
Royal Dutch/Shell .....	51.0	18.61
Shell Philippines Inc .....	17.0	6.20
Standard Oil Co. of California .....	35.0	12.78
Texaco Inc .....	35.0	12.78
Singapore .....	1,026.0	100.00
British Petroleum Co .....	26.0	2.53
Exxon Corp .....	230.0	22.42
Mobil Oil Corp .....	175.0	17.06
Royal Dutch/Shell .....	530.0	51.66
Singapore Govt .....	21.7	2.11
Standard Oil Co. of Indiana .....	21.7	2.11
Summit Industrial Corp .....	21.6	2.11
South Korea .....	425.0	100.00
Gulf Oil Corp .....	105.0	24.71

Table 4

## Free World: Company Crude Oil Refining Capacity, By Area (Continued)

Location	Crude Capacity (Thousand Barrels Per Day)	Percent of Total
<b>Far East and Oceania (Continued)</b>		
South Korea (Continued)		
Korea Explosives Co.....	27.5	6.47
Lucky Chemical Co.....	80.0	18.82
South Korean Govt.....	105.0	24.71
Standard Oil Co. of California.....	40.0	9.41
Texaco Inc.....	40.0	9.41
Union Oil Co. of California.....	27.5	6.47
Sri Lanka.....	34.4	100.00
Sri Lanka Govt.....	34.4	100.00
Taiwan.....	244.0	100.00
Taiwanese Govt.....	244.0	100.00
Thailand.....	166.2	100.00
Exxon Corp.....	35.0	21.06
Royal Dutch/Shell.....	19.5	11.73
Thailand Govt.....	66.2	39.83
Thai Oil Refinery Co., Ltd.....	45.5	27.38
<b>Western Europe.....</b>	<b>20,016.9</b>	<b>....</b>
Austria.....	220.0	100.00
Austrian Govt.....	220.0	100.00
Belgium.....	1,093.8	100.00
British Petroleum Co.....	160.7	14.69
Exxon Corp.....	265.0	24.23
Occidental Petroleum Corp.....	98.0	8.96
Petrofina S.A.....	160.7	14.69
Royal Dutch/Shell.....	9.4	0.86
Standard Oil Co. of California.....	140.0	12.80
Texaco Inc.....	140.0	12.80
Wintershall A.G.....	120.0	10.97
Cyprus.....	15.0	100.00
British Petroleum Co.....	2.2	15.00
Cyprus Govt.....	5.4	35.00
Mobil Oil Corp.....	3.0	20.00
Petrolina Marketing Co.....	2.2	15.00
Royal Dutch/Shell.....	2.2	15.00
Denmark.....	220.0	100.00
Exxon Corp.....	71.0	32.27
Gulf Oil Corp.....	90.0	40.91
Royal Dutch/Shell.....	59.0	26.82
Finland.....	196.0	100.00
Finnish Govt.....	196.0	100.00
France.....	3,341.7	100.00
British Petroleum Co.....	336.3	10.06
Cie. Francaise Des Petroles.....	575.8	17.23
Cie. Francaise De Raffinage.....	393.5	11.78
Esso Standard S.A.F.....	69.9	2.09
Exxon Corp.....	282.2	8.45
French Govt.....	478.1	14.31
Gulf Oil Corp.....	69.9	2.09
Mobil Oil Corp.....	196.3	5.88
Pechelbronn S.A.....	13.1	0.39
Royal Dutch/Shell.....	560.8	16.78
Shell Francaise.....	78.0	2.33
Soc. Francaise Des Petroles BP.....	130.6	3.91
Standard Oil Co. of California.....	78.6	2.35
Texaco Inc.....	78.6	2.35

Table 4

## Free World: Company Crude Oil Refining Capacity, By Area (Continued)

Location	Crude Capacity (Thousand Barrels Per Day)	Percent of Total
<b>Western Europe (Continued)</b>		
Greece.....	411.0	100.00
Exxon Corp.....	36.5	8.88
Greek Govt.....	98.0	23.85
Latsis Group.....	100.0	24.33
Thomas A. Pappas.....	36.5	8.88
Vardinoyannis Group.....	140.0	34.06
Ireland.....	56.0	100.00
British Petroleum Co.....	9.0	16.00
Exxon Corp.....	22.4	40.00
Royal Dutch/Shell.....	13.4	24.00
Texaco Inc.....	11.2	20.00
Italy.....	3,952.7	100.00
Anic SPA.....	57.3	1.45
Anonima Petroli Italiana.....	81.0	2.05
Attilio Monti Group.....	166.6	4.22
Cie. Francaise Des Petroles.....	196.8	4.98
Erg-Raff. Edoardo Garrone.....	147.0	3.72
Exxon Corp.....	467.9	11.83
Gulf Oil Corp.....	60.0	1.52
Industria Leganti Stradali Del Affini.....	7.9	0.20
Iplom-Raffineria Petroli.....	31.2	0.79
Italian Govt.....	589.3	14.90
Liquichimica SPA.....	12.0	0.30
Lombarda Petroli.....	18.8	0.48
Mediterranea SPA.....	505.0	12.78
Mobil Oil Corp.....	150.0	3.79
Montedison SPA.....	330.0	8.35
Petrofina S.A.....	46.2	1.17
Phillips Petroleum Co.....	9.8	0.25
Raffineria Dellepiane.....	20.0	0.51
Raffineria Olii Lubrificanti.....	1.4	0.03
Sanquirico SPA.....	32.5	0.82
Saras SPA.....	360.0	9.11
Sarom Raffinazione SPA.....	332.0	8.40
Soc. Italiana Resine.....	118.8	3.00
Soc. Petrolifera Italiana.....	8.6	0.22
Standard Oil Co. of California.....	79.1	2.00
Standard Oil Co. of Indiana.....	100.0	2.53
Texaco Inc.....	23.5	0.60
Netherlands.....	1,970.5	100.00
British Petroleum Co.....	490.0	24.87
Cie. Francaise Des Petroles.....	130.0	6.61
Exxon Corp.....	325.0	16.49
Gulf Oil Corp.....	94.0	4.77
Mobil Oil Corp.....	125.0	6.34
Royal Dutch/Shell.....	500.0	25.37
Smid and Hollander.....	6.5	0.33
Standard Oil Co. of California.....	205.2	10.41
Texaco Inc.....	94.8	4.81
Norway.....	258.0	100.00
British Petroleum Co.....	29.7	11.51
Exxon Corp.....	113.0	43.80
Norsk Hydro.....	54.0	20.93
Raffinor A/S.....	6.3	2.44
Royal Dutch/Shell.....	55.0	21.32



Table 4

## Free World: Company Crude Oil Refining Capacity, By Area (Continued)

Location	Crude Capacity (Thousand Barrels Per Day)	Percent of Total
<b>Western Europe (Continued)</b>		
Portugal.....	110.0	100.00
Portuguese Govt.....	110.0	100.00
Spain.....	1,165.0	100.00
Banco Espanol De Credito.....	80.0	6.87
Cia. Arrendaria Del Petroleos.....	57.0	4.89
Cia. Espanola De Petroleos.....	348.8	29.94
Cia. Iberica Ref. De Petroleos.....	19.2	1.65
Gulf Oil Corp.....	64.0	5.50
Marathon Oil Co.....	33.6	2.88
Spanish Govt.....	330.3	28.35
Spanish Private Interests.....	70.3	6.03
Standard Oil Co. of California.....	40.9	3.51
Texaco Inc.....	40.9	3.51
Union Explosivos Rio Tinto.....	80.0	6.87
Sweden.....	413.0	100.00
British Petroleum Co.....	110.0	26.64
Nynas Petroleum.....	38.0	9.20
Royal Dutch/Shell.....	100.0	24.21
Swedish Cooperative.....	132.0	31.96
Texaco Inc.....	33.0	7.99
Switzerland.....	138.0	100.00
British Petroleum Co.....	17.8	12.90
Cie. Francaise Des Petroles.....	2.2	1.59
Exxon Corp.....	30.3	21.96
Gulf Oil Corp.....	16.2	11.74
Italian Govt.....	15.9	11.52
Petrofina S.A.....	2.4	1.74
Royal Dutch/Shell.....	48.8	35.36
Texaco Inc.....	4.4	3.19
Turkey.....	315.5	100.00
British Petroleum Co.....	15.3	4.85
Marmara Refining Co.....	4.5	1.43
Mobil Oil Corp.....	45.9	14.55
Royal Dutch/Shell.....	24.3	7.70
Turkish Govt.....	225.5	71.47
United Kingdom.....	2,873.0	100.00
Berry Wiggins & Co., Ltd.....	2.0	0.07
British Petroleum Co.....	623.2	21.69
Burmah Oil Co., Ltd.....	25.3	0.88
Cie. Francaise Des Petroles.....	94.5	3.29
Continental Oil Co.....	87.5	3.05
Exxon Corp.....	700.0	24.37
Gulf Oil Corp.....	103.0	3.59
Imperial Chemical Industries.....	50.0	1.74
Mobil Oil Corp.....	175.0	6.09
Petrofina S.A.....	94.5	3.29
Phillips Petroleum Co.....	56.5	1.97
Royal Dutch/Shell.....	585.0	20.36
Standard Oil Co. of Indiana.....	90.0	3.13
Tarmac Darby, Ltd.....	6.5	0.23
Texaco Inc.....	180.0	6.25
West Germany.....	2,986.7	100.00
British Petroleum Co.....	419.7	14.05
Cie. Francaise Des Petroles.....	21.4	0.72

Table 4

## Free World: Company Crude Oil Refining Capacity, By Area (Continued)

Location	Crude Capacity (Thousand Barrels Per Day)	Percent of Total
<b>Western Europe (Continued)</b>		
West Germany (Continued)		
Continental Oil Co.....	12.8	0.42
Exxon Corp.....	532.0	17.81
French Govt.....	57.2	1.92
Italian Govt.....	65.0	2.18
Marathon Oil Co.....	115.4	3.86
Mobil Oil Corp.....	177.0	5.93
Occidental Petroleum Corp.....	27.5	0.92
Petrofina S.A.....	30.2	1.01
Royal Dutch/Shell.....	339.0	11.35
Standard Oil Co. of California.....	45.0	1.51
Texaco Inc.....	207.6	6.95
Union Rheinische Braunkohlen.....	125.0	4.19
Veba A.G.....	616.2	20.63
West German Govt.....	27.6	0.92
Wintershall A.G.....	168.1	5.63
Yugoslavia.....	281.0	100.00
Yugoslav Govt.....	281.0	100.00
<b>North America</b> .....	<b>17,867.2</b>	<b>....</b>
United States.....	14,995.3	100.00
Allied Chemical Corp.....	9.4	0.06
Allied Materials Corp.....	5.5	0.04
Amerada Hess Corp.....	28.5	0.19
American Petrofina Inc.....	60.0	0.40
American Trading and Prod. Co.....	49.0	0.32
Apco Oil Corp.....	58.7	0.39
Arizona Fuels Corp.....	4.0	0.03
Ashland Oil Inc.....	386.6	2.58
Atlantic Richfield Co.....	809.8	5.40
Bayou State Oil Corp.....	3.5	0.02
Beacon Oil Co.....	12.0	0.08
Big West Oil Co.....	5.1	0.03
British Petroleum Co.....	109.1	0.73
Calumet Industries Inc.....	2.4	0.02
Canal Refining Co.....	3.5	0.02
Caribou Four Corners Oil.....	7.0	0.05
Cenex.....	41.2	0.28
C & H Refinery Inc.....	0.5	....
Charter Oil Co.....	76.4	0.51
Cie. Francaise Des Petroles.....	42.2	0.28
Cities Service Co.....	268.0	1.79
Claiborne Gasoline Co.....	6.8	0.05
Coastal States Petrochemical Co.....	170.0	1.13
Clark Oil and Refining.....	107.0	0.71
Colorado Oil and Gas Corp.....	26.5	0.18
Commonwealth United Corp.....	3.4	0.02
Continental Oil Co.....	373.0	2.48
Cooperative Refinery Assoc.....	73.5	0.49
Cross, Henry H. Co.....	6.0	0.04
Crown Central Petroleum Co.....	51.0	0.34
Crystal Oil Co.....	12.5	0.08
Crystal-Princeton Refining Co.....	4.3	0.03
Crystal Refining Co.....	6.2	0.04
Diamond Shamrock Corp.....	48.3	0.32

Table 4

## Free World: Company Crude Oil Refining Capacity, By Area (Continued)

Location	Crude Capacity (Thousand Barrels Per Day)	Percent of Total
<b>North America (Continued)</b>		
United States (Continued)		
Dorchester Gas Prod. Co.....	1.0	0.01
Dow Chemical Co.....	32.0	0.21
Earth Resources Inc.....	43.9	0.29
Eddy Refining Co.....	3.3	0.02
Edgington Oil Co.....	29.5	0.20
Edgington Oxnard Asphalt Co.....	2.5	0.02
Evangeline Refining Co., Inc.....	4.0	0.03
Exxon Corp.....	1,263.0	8.42
Famariss Oil and Refining Co.....	42.0	0.28
Fletcher Oil and Refining Co.....	19.2	0.13
Flint Chemical Co.....	1.2	0.01
Gary Western Co.....	9.5	0.06
Gastown Inc.....	29.5	0.20
Getty Oil Co.....	197.0	1.31
Gladieux Refining Co.....	8.5	0.06
Gulf Oil Corp.....	866.3	5.77
Gulf States Oil and Refining Co.....	4.4	0.03
Hawaiian Independent Refining Inc.....	21.6	0.14
Howell Hydrocarbons Inc.....	3.6	0.02
Hunt Oil Co.....	18.0	0.12
Husky Oil, Ltd.....	57.3	0.38
Indiana Farm Bureau Coop. Assoc.....	18.0	0.12
J and W Refining Inc.....	9.7	0.07
Kern County Refinery.....	9.5	0.06
Kerr-McGee Corp.....	57.7	0.39
Kewanee Oil Co.....	4.5	0.03
Koch Industries Inc.....	109.8	0.73
La Jet Inc.....	11.0	0.07
Lakeside Refining Co.....	5.3	0.04
Laketon Asphalt Refining Co.....	8.5	0.06
Little America Stations Inc.....	24.3	0.16
Lunday-Thagard Oil Co.....	5.4	0.04
Major Oil Corp.....	8.0	0.05
Marathon Oil Co.....	324.0	2.16
Marion Corp.....	17.3	0.12
McMillan Ring-Free Oil Co.....	16.7	0.11
Mid-America Refining Co.....	3.1	0.02
Midlands Cooperatives Inc.....	19.0	0.13
Mid-Tex Refinery.....	2.6	0.02
Mobil Oil Corp.....	893.5	5.96
Monsanto Co.....	47.0	0.31
Mountaineer Refining Co., Inc.....	0.3	....
Murphy Oil Corp.....	137.5	0.92
National Coop. Refining Assoc.....	54.2	0.36
Navajo Refining Co.....	30.0	0.20
North American Petroleum Corp.....	10.0	0.07
Northland Oil and Refining Co.....	5.0	0.03
Oil Shale Co.....	40.0	0.27
Oklahoma Cement Co.....	25.0	0.17
Pacific Resources Inc.....	23.4	0.16
Pasco Inc.....	48.6	0.32
Pauley Petroleum Co.....	11.5	0.08
Pennzoil United Inc.....	62.3	0.42

Table 4

## Free World: Company Crude Oil Refining Capacity, By Area (Continued)

Location	Crude Capacity (Thousand Barrels Per Day)	Percent of Total
<b>North America (Continued)</b>		
United States (Continued)		
Petrofina S.A.....	140.0	0.93
Phillips Petroleum Co.....	408.0	2.72
Plateau Inc.....	7.5	0.05
Powerine Oil Co.....	46.0	0.31
Pride Refining Inc.....	36.5	0.24
Quaker State Oil Refining Corp.....	24.5	0.16
Quintana-Howell Joint Venture.....	44.4	0.30
Refinery Corp.....	20.5	0.14
Reserve Oil and Gas Co.....	22.1	0.15
Road Oil Sales Inc.....	1.5	0.01
Rock Island Refining Corp.....	29.5	0.20
Royal Dutch/Shell.....	797.7	5.32
Sabre Refining Inc.....	3.5	0.02
Sage Creek Refining Co.....	1.2	0.01
San Joaquin Refining Co.....	29.3	0.20
Seminole Asphalt Refining Co.....	5.7	0.03
Shell Oil Co.....	358.3	2.39
Skelly Oil Co.....	21.7	0.14
Somerset Refinery Inc.....	3.0	0.02
South Hampton Co.....	30.1	0.20
Southwestern Refining Co.....	114.3	0.76
Standard Oil Co. of California.....	1,024.0	6.83
Standard Oil Co. of Indiana.....	1,115.0	7.44
Standard Oil Co. of Ohio.....	323.2	2.16
Sunland Refining Corp.....	15.0	0.10
Sun Oil Co.....	484.0	3.23
Tenneco Inc.....	106.2	0.71
Tesoro Petroleum Corp.....	76.0	0.51
Texaco Inc.....	1,098.0	7.32
Texas Asphalt and Refining Co.....	6.0	0.04
Texas City Refining Inc.....	76.5	0.51
Texas Eastern Transmission Corp.....	28.5	0.19
Texas Fuel and Asphalt Co.....	1.0	0.01
Thrift Way Inc.....	1.6	0.01
Tonkawa Refining Co.....	6.0	0.04
Toro Petroleum Corp.....	36.0	0.24
Ultramar Co., Ltd.....	13.0	0.09
Union Oil Co. of California.....	495.0	3.30
Union Pacific Corp.....	152.1	1.01
United Refining Co.....	61.5	0.41
U.S. Oil and Refining Co.....	18.5	0.12
V-1 Oil Co.....	3.0	0.02
Vermont Gas Systems Inc.....	21.0	0.14
Vickers Petroleum Corp.....	32.5	0.22
Warrior Asphalt Co.....	3.0	0.02
Warrior Oil Co.....	5.0	0.03
West Coast Oil Co.....	15.0	0.10
Westland Oil Co.....	5.0	0.03
Winston Refining Co.....	20.0	0.13
Wireback Oil Co.....	1.5	0.01
Witco Chemical Co.....	30.0	0.20
Yetter Oil Co.....	1.0	0.01
Young Refining Corp.....	5.0	0.03

Table 4

## Free World: Company Crude Oil Refining Capacity, By Area (Continued)

Location	Crude Capacity (Thousand Barrels Per Day)	Percent of Total
<b>North America (Continued)</b>		
Canada .....	2,111.9	100.00
BP Refinery Canada, Ltd. ....	48.3	2.29
British Petroleum Co. ....	93.7	4.43
Consumers Cooperative Refining Inc. ....	25.0	1.18
Exxon Corp. ....	387.0	18.33
Gulf Oil Canada, Ltd. ....	112.5	5.32
Gulf Oil Corp. ....	245.7	11.63
Husky Oil, Ltd. ....	11.2	0.53
Imperial Oil, Ltd. ....	165.8	7.85
Irving Oil, Ltd. ....	65.0	3.08
Pacific Petroleum, Ltd. ....	5.7	0.27
Petrofina Canada, Ltd. ....	31.6	1.50
Petrofina S.A. ....	61.4	2.91
Phillips Petroleum Corp. ....	5.3	0.25
Royal Dutch/Shell. ....	264.5	12.52
Shaheen Natural Resources Co. ....	100.0	4.74
Shell Canada, Ltd. ....	39.5	1.87
Standard Oil Co. of California. ....	87.0	4.12
Sun Oil Co. ....	80.0	3.79
Texaco Canada, Ltd. ....	36.0	1.71
Texaco Inc. ....	124.0	5.87
Ultramar Co., Ltd. ....	115.0	5.44
Union Oil Co. of California. ....	6.7	0.32
Union Oil Co. of Canada. ....	1.0	0.05
Mexico .....	760.0	100.00
Mexican Govt. ....	760.0	100.00
<b>South America and Caribbean</b> .....	<b>6,891.8</b>	<b>....</b>
Antigua .....	16.0	100.00
Antigua Govt. ....	16.0	100.00
Argentina .....	720.5	100.00
Argentina De Petroleo S.A. ....	5.8	0.81
Argentine Govt. ....	475.8	66.04
Destileria Argentina De Petroleo. ....	1.8	0.25
Exxon Corp. ....	108.9	15.12
Ragor Saic. ....	0.6	0.08
Ref. De Petroleo La Isaura. ....	12.6	1.75
Royal Dutch/Shell. ....	115.0	15.95
Bahamas .....	500.0	100.00
New England Petroleum Co. ....	325.0	65.00
Standard Oil Co. of California. ....	175.0	35.00
Barbados .....	3.0	100.00
Mobil Oil Corp. ....	3.0	100.00
Bolivia .....	25.5	100.00
Bolivian Govt. ....	25.5	100.00
Brazil .....	961.8	100.00
Brazilian Govt. ....	943.0	98.04
Ref. De Petroleo Ipiranga. ....	9.3	0.97
Ref. De Petroleos De Manguinhos. ....	9.5	0.99
Chile .....	123.5	100.00
Chilean Govt. ....	123.5	100.00
Colombia .....	172.1	100.00
Colombian Govt. ....	161.5	93.84
Exxon Corp. ....	5.6	3.25
Texaco Inc. ....	5.0	2.91

Table 4

## Free World: Company Crude Oil Refining Capacity, By Area (Continued)

Location	Crude Capacity (Thousand Barrels Per Day)	Percent of Total
<b>South America and Caribbean (Continued)</b>		
Costa Rica.....	11.0	100.00
Costa Rican Govt.....	11.0	100.00
Dominican Republic.....	45.5	100.00
Dominican Govt.....	15.0	32.97
Falconbridge Dominicana.....	15.5	34.06
Royal Dutch/Shell.....	15.0	32.97
Ecuador.....	44.4	100.00
Anglo-Ecuadorean Oilfields.....	14.8	33.33
Burmah Oil Co., Ltd.....	15.6	35.14
Ecuadorean Govt.....	5.0	11.26
Gulf Oil Corp.....	8.0	18.02
Texaco Inc.....	1.0	2.25
El Salvador.....	14.0	100.00
Exxon Corp.....	9.1	65.00
Royal Dutch/Shell.....	4.9	35.00
Guatemala.....	24.8	100.00
Royal Dutch/Shell.....	4.3	17.34
Standard Oil Co. of California.....	6.5	26.21
Texaco Inc.....	14.0	56.45
Honduras.....	14.0	100.00
Ref. Texaco De Honduras.....	4.6	33.00
Texaco.....	9.4	67.00
Jamaica.....	33.0	100.00
Exxon Corp.....	33.0	100.00
Martinique.....	10.4	100.00
Cie. Francaise Des Petroles.....	2.6	25.00
Exxon Corp.....	1.5	14.50
French Govt.....	2.6	25.00
Royal Dutch/Shell.....	2.5	24.00
Texaco Inc.....	1.2	11.50
Netherlands Antilles.....	900.0	100.00
Exxon Corp.....	440.0	48.89
Royal Dutch/Shell.....	460.0	51.11
Nicaragua.....	13.2	100.00
Exxon Corp.....	13.2	100.00
Panama.....	100.0	100.00
Texaco Inc.....	100.0	100.00
Paraguay.....	10.0	100.00
Refineria Paraguaya S.A.....	10.0	100.00
Peru.....	129.6	100.00
Peruvian Govt.....	129.6	100.00
Puerto Rico.....	283.8	100.00
Commonwealth Oil Refining Co.....	101.4	35.73
Gulf Oil Corp.....	37.8	13.32
Sun Oil Co.....	85.0	29.95
Tesoro Petroleum Corp.....	59.6	21.00
Trinidad and Tobago.....	461.0	100.00
Texaco Inc.....	361.0	78.31
Trinidad and Tobago Govt.....	100.0	21.69
Uruguay.....	43.0	100.00
Uruguayan Govt.....	43.0	100.00
Venezuela.....	1,531.7	100.00
Atlantic Richfield Co.....	45.4	2.96
Exxon Corp.....	740.0	48.32

Table 4

## Free World: Company Crude Oil Refining Capacity, By Area (Continued)

Location	Crude Capacity (Thousand Barrels Per Day)	Percent of Total
<b>South America and Caribbean (Continued)</b>		
Venezuela (Continued)		
Gulf Oil Corp.....	105.1	6.86
Mobil Oil Corp.....	102.0	6.66
Phillips Petroleum Co.....	5.1	0.33
Royal Dutch/Shell.....	380.0	24.81
Standard Oil Co. of California.....	61.5	4.01
Texaco Inc.....	62.6	4.09
Venezuelan Govt.....	30.0	1.96
Virgin Islands.....	700.0	100.00
Amerada Hess Corp.....	700.0	100.00